MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

MAIN REPORT

Alberta Municipal Affairs
Urban Advisory Group and
Special Projects Branch

July 1983

NOTE:

This is one of three volumes which comprise the entire Report on Municipal Services in the County of Strathcona No. 20.

Companion volumes to this one include:

- The Summary Report
- Appendices

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MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

MAIN REPORT

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MAIN REPORT

PART I - INTRODUCTION

MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

PART I - INTRODUCTION

The County of Strathcona No. 20 is unlike any other municipality in Alberta. It is organized and classified as a rural municipality, but less than 10 per cent of its population lives on farms. It contains Sherwood Park, the eighth largest urban centre in Alberta and the largest unincorporated hamlet to be found almost anywhere.

Strathcona County also contains part of the largest industrial concentration in the province. And it has the greatest number of country-residential (acreage) developments of any Alberta municipality.

By normal Alberta standards Strathcona County is an unusual municipality, but it also is one of the most successful. Over the past 20 years it has managed to provide its residents with a level and range of municipal services which is unsurpassed by any other rural municipality and which, in many respects, is comparable to that provided in large urban centres.

Residents of the county have indicated in recent surveys a high degree of satisfaction with the county's municipal operations. They also have indicated a strong 'community-identity,' especially in their majority opposition to proposed annexation by the City of Edmonton.[1]

The ability of Strathcona County to provide a high level of municipal services has been due in large part to the tax revenues derived from the 'Refinery Row' industrial complex on the western edge of the county. The availability of that industrial tax revenue is also one reason why Sherwood Park has remained a hamlet within the county rather than incorporating as an autonomous town or city.

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[1] See Gahr, G. 1976. Sherwood Park: A Study in Suburbia. Dept. of Geography, University of Alberta; and Burton, T.L. 1979. A Strathcona County Residents Survey. Strathcona annexation study; Also see Appendix III of this report.

A. RECENT CHANGES

Two major occurences in the first two years of the 1980's have had a major impact on Strathcona County.

Annexation

The provincial government's decision on the annexation application by the City of Edmonton significantly affected Strathcona County.[1] The boundary changes which were approved effective 1 January 1982 resulted in a loss by the county of about seven per cent of its population, 13 per cent of its area and 20 per cent of its tax revenue base.

In excess of 80 per cent of the taxable property lost was industrial assessment, mainly in respect to the portion of 'Refinery Row' annexed by Edmonton. Strathcona County received some compensation through special provincial grants, but it lost a sizeable portion of the property tax base which had helped to finance the municipal services provided in Sherwood Park and throughout the rest of the county.[2]

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[1] Alberta Government. 1981, Report and Decision Concerning the Edmonton Annexation Application. Edmonton.

[2] The provincial grants provided to Strathcona as compensation for annexation total $19,986,820. Of that total amount, $13,478,600 is for municipal operations. The grant is to be paid over a five year period commencing with $4,492,867 in 1982/83 and reducing each year to the final payment in 1986/87 of $898,573.

Recession

General economic conditions, worldwide and throughout Canada, took an abrupt turn for the worse in the early 1980's. In Alberta, the economic deterioration was especially noticeable because it came suddenly after a decade of unprecedented growth and prosperity.

All municipalities in Alberta, and the County of Strathcona is no exception, have had to cope with the financial difficulties arising from the economic recession. Government revenues are no longer increasing as they had in the recent past. Expenditure restraints and the re-evaluation of services and their financing have been required of all levels of government.

B. STRATHCONA'S REACTION

Strathcona County has been quick to undertake several steps to minimize the adverse effects upon its operations of the economic slowdown and the revenue loss due to annexation. In general, these steps have been taken to reduce expenditure increases while at the same time maintaining the overall level of services that the county has been able to provide in the past.[1]

Major steps taken include administration re-organization, elimination of service duplication, fiscal policy re-examination and a review of staffing and personnel functions. Also, the county has commissioned a fiscal impact study to assess the effects of new developments and an overall economic development study. In addition, the county has requested Alberta Municipal Affairs to prepare a study on municipal services.

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[1] See Silvester, R. "Civic Budgets Meet the Challenge," Municipal Counsellor, V. 28, no. 1, Jan/Feb 1983, p. 11.

C. PURPOSE OF THE STUDY

The information contained in this report is intended to provide the Strathcona County administration and council with a framework for evaluating the municipal services which the county provides.

There are two major objectives of the study:

- To compare the level and financing of municipal services in Strathcona County with that in other selected Alberta municipalities.
- To determine, as far as is possible, the benefits and costs of each municipal service to the rural and urban (Sherwood Park) components of the county.

The study is expected to assist Strathcona County in evaluating appropriate and realistic levels of services in relation to what is provided in other municipalities. Also, it is expected to provide some guidelines in terms of service administration and financing in respect to the mix of urban and rural services provided in the county. (See Appendix I for a copy of the study outline.)

D. COMPARISON MUNICIPALITIES

There are no other municipalities in Alberta which are similar to the County of Strathcona due to its unique urban/rural nature. There are, however, incorporated urban centres which are comparable to

Sherwood Park in size and/or location (that is, in close proximity to a major city). Also, there are rural municipalities which are reasonably comparable to the rural components of Strathcona County.

The municipalities selected for comparison purposes are:

Urban Centres

Airdrie
Fort McMurray
Fort Saskatchewan
Grande Prairie
Leduc
Red Deer
St. Albert
Spruce Grove

Rural Municipalities

County of Leduc #25
County of Parkland #31

M.D. of Foothills #31
M.D. of Rockyview #44
M.D. of Sturgeon #90

Urban Comparisons

Airdrie, Leduc and Spruce Grove are all smaller than Sherwood Park in population size, but they are similar in terms of being newly developed suburban communities and in terms of being located on the outskirts of a major city (Airdrie is north of Calgary, Leduc is south of Edmonton, Spruce Grove is west of Edmonton).

Fort Saskatchewan is smaller in population than Sherwood Park, but it has similarities in terms of its location near Edmonton and in terms of having an extensive industrial base to generate tax revenues.

Fort McMurray, Grande Prairie, Red Deer and St. Albert have a similar population size as Sherwood Park. St. Albert has the added similarity of its location on the outskirts of Edmonton.

Some of the urban centres used for comparisons are towns while others are cities. However, that has little effect upon municipal operations, except for a few specific provincial grants, and therefore it does not affect the general comparability with Sherwood Park.

Rural Comparisons

All of the counties and municipal districts (MDs) used for the comparisons are similar to the rural part of Strathcona County in that they are all located immediately adjacent to a major city, either Edmonton or Calgary. They also have considerable country-residential development, although not to the extent of Strathcona County.

The distinction between a county and an MD relates only to the provision of local school services. In counties, school services are a responsibility of the county; in MDs they are the responsibility of one or more school divisions. In terms of municipal service responsibilities there is no difference between a county and an MD.

E. FINANCIAL DATA

For all comparison municipalities and for Strathcona County financial data is presented for the years 1976 and 1981. Strathcona County data is also presented for 1982. Comparisons are made primarily in per capita terms or in terms of expenditures/revenues per $1000 equalized assessment.

The 1976 data is presented only in the major categories of municipal revenues and expenditures. It is used primarily to assess trends to 1981 in the relative importance of each major category. The data is derived from the 1976 Municipal Statistics published by Alberta Municipal Affairs.

The 1981 data is presented in a comparable manner to the 1976 data. It is also analysed in a more detailed form in respect to each municipal service. 1981 is the latest year for which complete (or nearly complete) financial data is available for all comparison municipalities, and therefore 1981 is the year for which most comparisons are made with Sherwood Park and the rest of Strathcona County. The primary source of the data used is the financial statements of the municipalities as submitted to and reviewed by the Municipal Services Branch of Alberta Municipal Affairs. That source has been supplemented by direct contact with administrators in individual municipalities.

1982 data for Strathcona County is presented in the same manner as that of 1981. It is used to assess any significant changes in the municipal operation which may have occured due to the annexation decision or to recent changes in the county's administrative structure. The main data source is the 1982 financial statement of Strathcona submitted to and reviewed by Municipal Affairs. It is supplemented with extensive background data provided by the county administration.

Appendix II includes tables of data for Strathcona County and the comparison municipalities. It includes population, assessment and density data as well as financial data in the main revenue/expenditure categories.

F. RESIDENTS SURVEY DATA

Throughout the main report, information is presented on the opinions of Strathcona County residents in regard to the municipal services they receive. As much as possible, the survey data is presented by electoral division and by type of residence; that is, urban, country-residential, rural.

The source of the data is studies prepared by Dr. T.L. Burton of the University of Alberta.[1] Some tabulated data and commentary is contained in Appendix III.

The results of the Burton studies require some qualification in regard to their use in this report. The opinion poll was conducted at a time when Strathcona residents were confronted with the imminent possibility of being annexed by the City of Edmonton. Some residents polled may have been less critical of the county's operations than they would have been in more normal circumstances. As well, the poll took place prior to the economic recession and well before Strathcona County adopted its current restraint policies.

These important aspects relating to the Burton studies should be borne in mind when the survey results are presented in this report. Nevertheless, the advantages of the survey - its comprehensiveness, high response rate, and presentation of results by electoral division and type of resident - outweigh any potential disadvantages associated with the time the survey was conducted.

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[1] A Strathcona County Residents Survey, Strathcona annexation study, 1979; Local Public Services in the County of Strathcona and A Regional Analysis of the Strathcona County Residents Survey, Dept. of Recreation Administration, University of Alberta, 1980.

MAIN REPORT

PART II - STRATHCONA COUNTY OVERVIEW

MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

PART II - STRATHCONA COUNTY OVERVIEW

The County of Strathcona No. 20 is located immediately east of the City of Edmonton. It is bounded to the north by the North Saskatchewan River, to the east by Elk Island National Park and to the south by Township Line No. 51. Cooking Lake, one of the major bodies of water in the area east of Edmonton, is located in the south-east corner of Strathcona County. (See the inside back cover of the Main Report for a county map.)

The Hamlet of Sherwood Park (1982 population of about 30,000) is located in the west-central part of the county, approximately 15 km from the Edmonton city centre. The western edge of the county adjacent to Edmonton includes extensive industrial developments, including a portion of 'Refinery Row' along primary highway No. 16A (Base Line Road).

In the lightly-wooded and lake area east and south of Sherwood Park are found numerous country-residential or acreage developments. The north-east portion of the county is primarily agricultural land.

A. POPULATION

Strathcona County has the largest population of any rural municipal jurisdiction in Alberta. As Table 1 below shows, the majority of that population is in Sherwood Park, with country-residential residents accounting for the second largest share.

TABLE 1

Strathcona County Population, November 1982 Estimate

Sherwood Park	29,764
Country-Residential	13,820
Farm	2,981
Other Hamlets	1,384
TOTAL	47,949

Source: see Appendix Table II-1, p. A-7.

The 1982 population was less than that of 1981 due to residents lost as a result of the Edmonton annexation decision. About 3500 persons resided in the portion of the county which was annexed to Edmonton and to the County of Leduc No. 25 on 1 January 1982. New growth within the county, especially in Sherwood Park, compensated for some of the annexed population loss. Nevertheless, the county's total population declined by 2,130 (1981 - 50,079; 1982 - 47,949).

Of the annexed population, about 1600 were residents of mobile home parks while the remaining 1900 were farm or country-residential residents. The annexation had the effect of increasing the portion of the county's population represented by Sherwood Park, while that represented by rural residents declined.

TABLE 2

Strathcona County Population; Per Cent of Total
by Type of Resident, 1981 and 1982

	1981	1982
Sherwood Park	58	62
Country-Residential	26	29
Farm	10	6
Other Hamlets	6	3

Source: same as Table 1.

Population Growth[1]

Prior to the 1982 annexation decision, the total population of Strathcona County had shown steady growth. Most of this growth was due to Sherwood Park which increased from less than 600 in the mid-1950's to its present 30,000. Also, especially during the 1970's, the country-residential sector of the population increased steadily.

Table 3 shows the growth rates in the county from 1976 to 1981 and from 1981 to 1982. The effect of the 1982 annexation upon the rural sectors of the population and upon the total population is clearly evident.

TABLE 3

Strathcona County Population; Average Annual Rate
of Growth, 1976 to 1981 and 1981 to 1982

	1976-1981	1981-1982
Sherwood Park	1.8%	3.3%
Country-Residential	8.0%	5.1%
Farm	5.2%	-42.1%
Other Hamlets and Mobile Home Parks	3.2%	-53.6%
TOTAL COUNTY	3.7%	-4.3%

Source: same as Table 1.

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[1] Average annual growth rates for population (and for other figures later on in the report) are calculated using the following formula: $(\sqrt[t]{Nx/Ny} - 1) \times 100$; where t is number of years, Nx is number at end of the time period, and Ny is the number at the start.

The 3.7 per cent annual growth rate in the total county from 1976 to 1981 is similar to the 3.8 per cent growth rate of Alberta's total population over the same five year period. However, the different sectors of the county's population show different rates of growth.

Sherwood Park's growth rate is considerably less than the provincial average and, as Table 4 indicates, it is less than that of the urban centres used as a comparative basis. The reason is that the greatest growth for Sherwood Park occured in the 1960's and by the mid-1970's it had reached its planned stage of development.[1]

TABLE 4

Sherwood Park and Comparison Urban Centres; Average Annual Population Growth Rates, 1976 to 1982

Airdrie	38.7%
Fort McMurray	14.0%
Fort Saskatchewan	6.1%
Grande Prairie	5.6%
Leduc	6.6%
Red Deer	7.4%
St. Albert	5.5%
Spruce Grove	7.9%
Sherwood Park	2.1%

Source: same as Table 1.

On the other hand, the growth rate of the rural sector of Strathcona County, which includes all but Sherwood Park, is among the highest of the rural municipalities used for comparisons (see Table 5). Most of the growth in Strathcona County is due to country-residential developments. Only the County of Parkland No. 31, which also has significant acreage developments, exceeded Strathcona's rate of growth.[1]

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[1] Note that since Sherwood Park was unaffected by annexation, growth rates shown in Table 4 are from 1976 to 1982.

TABLE 5

Rural Strathcona County and Comparison Rural Municipalities; Average Annual Population Growth Rates, 1976 to 1981

County Leduc #25	0.2%
County Parkland #31	7.9%
MD Foothills #31	1.7%
MD Rockyview #44	2.2%
MD Sturgeon #90	6.1%
Strathcona County (rural)	6.5%

Source: same as Table 1.

Population growth rates are a significant factor affecting municipal services and financing. Municipalities with high rates of growth, like Airdrie and Fort McMurray, would have to devote resources to accommodating new population and providing them with the basic services. Communities with lower growth rates, such as Sherwood Park, could spend money improving existing services and providing additional ones such as social services, libraries, and expanded recreation programs.

Rural municipalities with high growth rates, like Parkland County or the rural sector of Strathcona County, would face increasing demands for improved services, especially for the construction and maintenance of roads to country-residential areas. The rates of growth shown in the preceding tables should be borne in mind for later sections of this report dealing with municipal service comparisons.

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[1] Growth rates in Table 5 are from 1976 to 1981 to avoid distortions due to annexation.

Population Density

The County of Strathcona is one of the smallest rural municipalities in Alberta in terms of total land area. It is also the most densely populated rural area in the province.

The land area of Strathcona County in 1982 was 124,485 hectares.[1] That amount was a reduction of 21,853 hectares from the area of 1981 due to the annexation decision. The loss of the annexed land had little effect upon the density figures for the county.

Density calculations for the total county have little meaning because of the presence of Sherwood Park. If Sherwood Park's area and population is excluded, however, the resulting figures give a good indication of the high rural density for the remainder of the county. Table 6 illustrates this feature, in terms of population density by area and by kilometers of roads.

TABLE 6

Rural Strathcona County and Comparison Rural Municipalities; Population Density 1981

	Persons Per Hectare	Persons Per km of Roads
County Leduc #25	0.03	3.9
County Parkland #31	0.07	9.7
MD Foothills #31	0.025	4.4
MD Rockyview #44	0.04	6.5
MD Sturgeon #90	0.08	8.5
Strathcona County (rural)	0.15	11.7

Source: see Appendix Tables II-4 and II-5, p. A-11 and A-12.

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[1] One hectare is approximately equal to 2.5 acres.

The high rural density in comparison with the other selected rural municipalities is due to the extensive country-residential developments in Strathcona County. Country-residential residents represent three-quarters of the rural (that is, non-Sherwood Park) population. The high rural density of the county is bound to have several implications in terms of municipal services, especially for road maintenance on the heavily-travelled county roads east and south of Sherwood Park.

Table 7 shows the density figures for Sherwood Park and for the comparison urban centres. The high density shown for Sherwood Park is somewhat misleading. From the tabulated figures, one might expect a community of high-rise apartments, but a casual visitor to the hamlet would be hard-pressed to find anything but single-family houses on spacious, landscaped lots.

There are two reasons for the apparent anomaly. One is that Sherwood Park is a carefully planned suburban community which has, more or less, reached its initial planned stage of development. From the mid 1970's on, it has not been a growth centre (see Table 4).

The second reason is that unlike a town or city, Sherwood Park has no corporate boundaries. The boundaries of the hamlet more or less conform to the periphery of developed, occupied lands. Sherwood Park does not include an abundance of vacant land, unlike some of the comparison urban centres. Most towns and cities in Alberta have enough vacant land to accommodate a doubling of their population in a 25 to 30 year period.

TABLE 7

Sherwood Park and Comparison Urban Centres; Population Density 1981

	Persons Per Hectare	Persons Per km of Roads
Airdrie	6.1	125
Fort McMurray	6.2	248
Fort Saskatchewan	3.8	141
Grande Prairie	5.9	142
Leduc	3.9	166
Red Deer	8.8	94
St. Albert	8.4	172
Spruce Grove	4.9	115
Sherwood Park	15.9	229

Source: same as Table 6.

Consequently, despite the data shown in Table 7, it is not expected that population density would cause any particular effect upon municipal services in Sherwood Park as compared to many of the sample urban centres. Sherwood Park is a suburban community in which over 85 per cent of the dwelling units are single-family detached houses.[1] In that respect, although it remains an unincorporated hamlet, it is similar to Airdrie, Leduc, Spruce Grove and, particularly, St. Albert - all of which are newly-developed suburban communities on the outskirts of a major city.

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[1] Strathcona County 1981 census summary.

B. ASSESSMENT

The value of assessed, taxable property within a municipality is a good indication of the municipality's capability to finance local services. Also of significance is the proportion of taxable property represented by non-residential development.

Almost always, those two measures of local tax-generating capability go hand in hand. A municipality with a comparatively high level of property assessment (usually measured in per capita terms) often has a high proportion of its property tax base comprised of commercial or industrial properties. On the other hand, a municipality with a high proportion of residential or farm properties usually has a comparatively low level of property assessment.

The County of Strathcona effectively illustrates both general types of property tax base if the urban (Sherwood Park) component is separated from the rural component.

Table 8 shows the comparison of Sherwood Park with the other sample urban centres in terms of per capita equalized assessment and proportion of non-residential properties.[1] The figures for Sherwood Park are relatively low, especially in comparison with Fort Saskatchewan which has extensive industrial development within its boundaries. Fort Saskatchewan is unusual in that aspect; but even in comparison to Red Deer, whose figures are near the average for Alberta urban centres, Sherwood Park appears less well-off.[2]

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[1] Equalized assessment values are calculated annually by Alberta Municipal Affairs to bring all property assessment in the province to a common and comparable denominator.

[2] Recall the hamlet boundary aspect, however. Sherwood Park has less area than equivalent sized cities or towns. See page 15.

TABLE 8

Sherwood Park and Comparison Urban Centres; Per Capita Equalized Assessment and Percentage of Non-Residential Property

	Equalized Assessment Per Capita 1982	Per Cent Non-Residential Property 1981
Airdrie	5,230	18
Fort McMurray	5,730	27
Fort Saskatchewan	16,600	74
Grande Prairie	7,990	39
Leduc	6,690	25
Red Deer	6,450	31
St. Albert	6,030	14
Spruce Grove	5,750	28
Sherwood Park	5,550	11

Source: see Appendix Tables II-2A and II-3, p. A-9 and A-10.

Table 9 shows the same set of figures for the rural component of Strathcona County and for the comparison rural municipalities. Strathcona County without Sherwood Park has a high level of assessment and a high proportion of non-residential property.

TABLE 9

Rural Strathcona County and Comparison Rural Municipalities; Per Capita Equalized Assessment and Percentage of Non-Residential Property

	Equalized Assessment Per Capita 1982	Per Cent Non-Residential (non-farm) Property 1981
County Leduc #25	11,710	62
County Parkland #31	14,470	61
MD Foothills #31	13,230	24
MD Rockyview #44	18,530	28
MD Sturgeon #90	10,660	39
Strathcona County (rural)	17,870	67

Source: same as Table 8.

The proportion of non-residential property for rural Strathcona County drops to 63 per cent in 1982 due to properties lost in the annexation decision. Nevertheless, the rural component of Strathcona has a different tax base structure than Sherwood Park.

The result when the two components of the county are combined is shown below.

	Per Capita Equalized Assessment	Per Cent Non-Residential (1982)
Sherwood Park	5,550	12
Rural Components	17,870	63
TOTAL COUNTY	10,220	43

The $10,220 per capita figure would be a high assessment level for an urban municipality, but somewhat less than average for a rural municipality. The apparently obvious conclusion is that Sherwood Park benefits from the rural tax base of the county; but things are not that straightforward. Rural residents may benefit from specific services which they would not receive if Sherwood Park were not part of the county, and the benefit to Sherwood Park of the rural tax base may be diminished by the cost of services in the rural areas.

C. GENERAL MUNICIPAL EXPENDITURES

This section presents an overview of general municipal expenditures in Strathcona County in comparison with the sample urban and rural municipalities.

Total General Operating Expenditures

General operating expenditures refers to the yearly expenses associated with general municipal services. It does not include expenditures for land development and subdivisions, for water and public transit utilities or for planning, health and school requisitions. Those expenditures are examined separately in later sections.

Table 10 shows the per capita general operating expenditures for 1981, plus the average annual increase over the 5 year period from 1976 to 1981 in the per capita expenditure. Much of the increase is due to cost inflation, but that has not been discounted since it is assumed inflationary factors affected all the municipalities in roughly the same manner. Also shown is the expenditure in terms of dollars per $1000 equalized assessment for 1981.[1]

Strathcona County shows the second highest per capita expenditure of all the municipalities listed in Table 10. The County of Leduc #25 exceeds the expenditure level of Strathcona but most of the other comparison municipalities, especially the urban ones, have an expenditure over $100 per capita less than Strathcona.

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[1] Dollars per $1000 equalized assessment is a figure which provides a comparable measure of 'fiscal effort' among municipalities.

TABLE 10

Strathcona County and Comparison Municipalities; General Operating Municipal Expenditures, dollars per capita 1981, average annual per capita expenditure increase 1976 to 1981, and expenditures in dollars per $1000 equalized assessment 1981

	$'s per capita 1981	Avg. Annual Per Capita Increase 1976-81	$'s per $1000 eq. assess. 1981
Airdrie	465	10.6%	109
Fort McMurray	617	9.1%	115
Fort Saskatchewan	660	28.8%	48
Grande Prairie	629	15.3%	95
Leduc	545	17.7%	96
Red Deer	710	16.5%	124
St. Albert	560	17.4%	100
Spruce Grove	720	21.9%	135
County Leduc #25	816	22.6%	74
County Parkland #31	621	11.9%	52
MD Foothills #31	512	9.5%	51
MD Rockyview #44	730	17.2%	53
MD Sturgeon #90	483	12.1%	54
Strathcona County 1981	791	27.6%	79
1982	700	20.0% (1976-82)	68

Source: see Appendix Table II-6, p. A-13.

The average annual per capita expenditure increase from 1976 to 1981 is higher for Strathcona than all other municipalities except Fort Saskatchewan. The figures indicate a high and rapidly-increasing level of municipal expenditures for Strathcona. The reasons for this are examined in more detail later in this report, but in general the overall expenditure increase is due to improved or new services, such as transit, road oiling, recreation programs and library services.

The level of expenditure in relation to the tax base, measured by equalized assessment, shows Strathcona County roughly in the middle range. Its expenditure per $1000 equalized assessment in 1981 is higher than the five comparison rural municipalities but it is lower than all of the urban ones except Fort Saskatchewan (which has an unusually high level of assessment, see Table 8, p. 18).

It should be pointed out that the 1982 data for Strathcona indicates a significant decrease in the level of expenditure to $700 per capita and $68 per $1000 equalized assessment. This would appear to indicate that the administrative and fiscal reforms implemented by the county in response to the annexation and economic slowdown have had some restraining effects on overall expenditures.

General Operating Expenditures by Main Service Function

Table 11 shows the relative importance in terms of expenditure for the main municipal service functions. (See Appendix Tables II-6A to II-6I for an explanation of what is included in each function.) Note that 'debt charges' and 'transfers to own funds' expenditures are in specific categories. Therefore, the figures shown for the municipal services are derived from the actual operating expense excluding debt payments, transfers and other fiscal services.

The difference between the urban and rural municipalities in the proportion of expenditure represented by specific services is quite apparent. The services of protection, waste and sewage, health and welfare and recreation all represent a higher percentage of total expenditure in the urban municipalities. For the rural municipalities, transportation is by far the dominant service with development (primarily agricultural service board activities) more important than in the urban centres.

TABLE 11

Strathcona County and Comparison Municipalities; Per Cent of General Operating Expenditures by Main Municipal Service Function 1981

	General Government	Protection	Transportation	Waste & Sewage	Health & Welfare	Development	Recreation & Culture	Debt Charges	Transfers to Own Funds
Airdrie	17	16	13	11	4.7	4.1	21	8.4	4.7
Fort McMurray	11	24	18	6.4	4.0	2.8	10	8.9	15
Fort Saskatchewan	7.4	8.0	8.6	3.2	1.3	0.9	11	14	45
Grande Prairie	8.7	17	13	3.8	2.7	-	12	7.8	35
Leduc	13	8.1	12	4.6	3.5	0.7	14	22	22
Red Deer	12	17	20	6.6	1.7	0.6	11	10	20
St. Albert	18	15	17	3.7	1.5	1.6	16	12	16
Spruce Grove	12	6.3	8.8	3.2	-	1.0	12	14	42
County Leduc #25	9.2	1.0	60	1.4	1.4	2.4	4.2	1.3	19
County Parkland #31	8.7	5.4	51	0.2	0.1	3.4	3.3	8.3	20
MD Foothills #31	8.0	1.7	61	0.4	-	4.5	1.9	0.5	22
MD Rockyview #44	11	1.9	62	0.3	-	4.0	1.5	6.6	13
MD Sturgeon #90	11	3.6	54	1.0	-	12	2.8	0.8	15
Strathcona County 1981	11	7.2	35	3.4	1.8	1.3	13	2.7	23
1982	16	10	28	4.4	2.1	0.7	15	6.0	17

Note: may not add to 100.0 due to rounding.

Source: see Appendix Tables II-6A to II-6I, pages A-14 to A-22.

Strathcona County, with its special urban/rural structure, shows percentages of expenditure which are generally somewhere between the rural and urban figures. That is particularly true with respect to transportation, protection and waste and sewage. Given that Strathcona County is a rural jurisdiction but includes an urban centre of nearly 30,000, the percentage of expenditure figures for Strathcona are what one might reasonably expect.

The 1982 figures for Strathcona in comparison with those for 1981 indicate no great difference in the relative importance of each service function. Most noticeable is the greater percentage for general government and lesser percentage for transportation. Changes in financial administration are the main cause.[1]

D. GENERAL MUNICIPAL REVENUES

The general municipal revenues presented in this section are those required to finance the operating expenditures discussed above. They exclude taxes collected to pay for requisitions, revenues from public transit and water utilities and revenues from land development and subdivision operations.

The total amount of general municipal revenues annually collected is expected to cover the total general operating expenditures. Most municipalities in fact operate on a small surplus basis, with revenues slightly exceeding expenditures.

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[1] See Section B of Part III, page 64 and Section H page 141.

General Operating Revenues by Main Revenue Category

Table 12 shows the percentage of operating revenues derived from the main revenue categories. (See Appendix Tables II-7A to II-7G for description of revenues in each category.)

The municipalities tabulated, especially the urban ones, show considerable variation in the relative importance of each revenue category. With respect to Strathcona County for 1981, it may be noted that the percentage of revenue from taxation, including property taxes, local improvement charges and business taxes, is slightly less than that of the other rural municipalities. Conditional grants are also of less relative importance in Strathcona in 1981, while sales of goods and services and transfers from own reserves and funds are of greater importance than in the other rural municipalities.

The comparatively high proportion of revenue from sales of goods and services and the comparatively low proportion of revenue from grants, conditional and unconditional, can be attributed to the urban component of the county. The reasons are explained in Part III of this report, especially in the sections dealing with recreation and with road grants.

The 1982 data for Strathcona County shows a much higher percentage of revenue from grants than in 1981, while the percentage from own reserves and funds drops sharply. The increased importance of grants is due primarily to the special grant received in compensation for land and revenues lost due to annexation. The decreased importance of own transfers is due to the financing and administrative changes undertaken after the annexation decision.

TABLE 12

Strathcona County and Comparison Municipalities; Per Cent of General Operating Revenues by Main Revenue Categories, 1981

	Municipal Property Taxes	Local Imp. & Business Taxes	Sales of Goods and Services	Other Own Source Revenue	Uncon- ditional Grants	Conditional Grants	Own Reserves and Funds
Airdrie	32	0.4	12	13	35	8	-
Fort McMurray	55	1.6	7.6	16	17	3	1.1
Fort Saskatchewan	50	2.1	1.4	26	3	6.4	12
Grande Prairie	38	7.4	7.9	26	5	12	3.1
Leduc	29	14	4.8	20	7.3	9.2	16
Red Deer	23	3.4	13	25	3.5	9.9	23
St. Albert	60	1.7	11	13	3.6	5.0	5.5
Spruce Grove	28	7.5	7.9	12	14	25	5.0
County Leduc #25	55	0.2	3.5	18	5.3	17	1.3
County Parkland #31	53	0.04	2.2	19	3.3	15	0.2
MD Foothills #31	46	8.8	1.0	20	11	14	-
MD Rockyview #44	57	1.8	3.2	19	5.9	12	1.2
MD Sturgeon #90	56	-	11	16	6.3	9.4	1.0
Strathcona County 1981	47	0.04	14	16	3.3	5.1	14
1982	49	0.03	12	12	17	9.2	1.1

Note: may not add to 100.0 due to rounding.

Source: see Appendix Tables II-7A to II-7G, pages A-23 to A-30.

E. REQUISITIONS

All municipalities are subject to provincially-imposed requisitions for the school foundation program (SFP) and for the provincial planning fund.

The SFP requisition is determined by a province-wide standard mill rate applied against each municipality's non-residential, non-farm equalized assessment.[1] There is no local discretion to the levy.

The planning fund requisition is applied in all municipalities, but the mill rate used varies depending upon the type of municipality and upon the municipality's own planning services. This requisition is examined in Part III of the report in the section on Planning Services (page 273).

Municipalities may also be subject to requisitions from local hospital authorities. These are examined in section R of Part III (page 335).

Supplementary School Requisitions

An evaluation of local school services and their financing is not within this report's terms of reference which deal with municipal (as distinct from school) services. However, the locally-imposed supplementary school requisition represents a major portion of the property tax levy in all municipalities. It is useful here to examine the level of the requisition in Strathcona County in comparison with the selected urban and rural municipalities.

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[1] Non-family corporate farmland and vacant residential land are also subject to the SFP levy.

Table 13 indicates that the supplementary school requisition in Strathcona County is about average in comparison with the rural municipalities in terms of: its per capita level; its rate of increase from 1976-81; and its level per $1000 equalized assessment. Its per capita level is higher than the urban centres except Fort Saskatchewan which has a very high assessment base.

TABLE 13

Strathcona County and Comparison Municipalities; Supplementary School Requisition, dollars per capita 1981, average annual per capita increase 1976 to 1981, and dollars per $1000 equalized assessment

	$'s per capita 1981	Avg. Annual Per Capita Increase 1976-81	$'s per $1000 eq. assess. 1981
Airdrie	82	5.8%	19
Fort McMurray	178	24.3%	33
Fort Saskatchewan	257	37.1%	20
Grande Prairie	164	19.3%	25
Leduc	135	34.2%	24
Red Deer	145	21.4%	25
St. Albert	135	21.0%	24
Spruce Grove	104	24.3%	20
County Leduc #25	252	33.2%	23
County Parkland #31	230	23.8%	19
MD Foothills #31	198	16.1%	20
MD Rockyview #44	266	23.1%	19
MD Sturgeon #90	203	26.4%	23
Strathcona County 1981	207	26.4%	20
1982	246	24.8% (1976-82)	24

Source; see Appendix Table II-8, p. A-31.

F. LONG-TERM DEBT

Municipalities may incur long-term debt to pay for the construction or acquisition of facilities required for municipal services. Almost all long-term municipal debt is in debentures financed by the Alberta Municipal Financing Corporation (a provincial crown corporation). Most municipal debenture debt is eligible for provincial interest subsidies.

The repayment of long-term debt may represent a significant portion of the annual municipal operating expenditures. (See Table 10, page 21.) Consequently, the level of the debt burden is an important factor in overall municipal financing.

General Debt

The general long-term debt is that incurred in respect to general municipal services. It does not include debt for water systems, public transit services or other municipal utility operations. See Table 14.

The level of general debt for Strathcona County is quite low, especially in comparison to the urban municipalities. It is, however, higher than four of the five comparison rural municipalities. Notice also that the per capita debt of the county is less in 1981 than that of 1976. The decrease is due to the $500 per capita debt reduction grant of 1979 (received by all Alberta municipalities) and to the fact that,

TABLE 14

Strathcona County and Comparison Municipalities; General Municipal Debt, dollars per capita 1981 and average annual percentage change in per capita debt 1976-81

	$'s per capita 1981	Avg. Annual Percent Change 1976-81
Airdrie	623	10.5%
Fort McMurray	256	-18.5%
Fort Saskatchewan	778	27.7%
Grande Prairie	1179	29.2%
Leduc	1000	18.3%
Red Deer	572	1.2%
St. Albert	734	16.6%
Spruce Grove	773	12.6%
County Leduc #25	100	90.4%
County Parkland #31	341	55.9%
MD Foothills #31	nil	nil
MD Rockyview #44	nil	nil
MD Sturgeon #90	43	*
Strathcona County 1981	136	-13.9%
1982	164	-8.9% (1976-82)

* no general debt in 1976.
Source: see Appendix Table II-12, p. A-35.

unlike the other municipalities (except Fort McMurray and the MDs of Foothills and Rockyview), new debt undertakings since the 1979 grant have been modest.

Utility Debt

The debt figures for utility operations, primarily water systems, are shown in Table 15. Strathcona County shows a debt level comparable to several of the urban municipalities and a rather high increase from 1976 to 1981.

TABLE 15

Strathcona County and Comparison Municipalities; Utility Debt, dollars per capita 1981 and average annual percentage change in per capita debt 1976-81

	$'s per capita 1981	Avg. Annual Percent Change 1976-81
Airdrie	113	5.9%
Fort McMurray	60	-24.1%
Fort Saskatchewan	167	15.6%
Grande Prairie	132	-0.3%
Leduc	237	26.2%
Red Deer	234	25.6%
St. Albert	197	19.7%
Spruce Grove	282	14.4%
County Leduc #25	109	55.5%
County Parkland #31	128	41.0%
MD Foothills #31	nil	nil
MD Rockyview #44	nil	nil
MD Sturgeon #90	78	26.6%
Strathcona County 1981	233	45.3%
1982	239	37.1% (1976-82)

Source: same as Table 14.

G. PROPERTY TAXES

The tabulated data in this section is derived from property assessment values provided by the individual municipalities and from the 1982 municipal and supplementary school mill rates. The municipal mill rate includes levies for the provincial planning fund and for hospital requisitions. In all cases, the planning and hospital levies represent less than 5 per cent of the total mill rate.

The comparisons should be viewed as a general indicator only. The sample properties used for tax calculations represent similar properties but not identical ones.

Urban Comparison (See Table 16)

Property taxes on the sample property in Sherwood Park are second highest in comparison with the other urban centres listed, being topped only in St. Albert. The total taxes, including municipal and supplementary school levies, are most comparable to those in Grande Prairie and Red Deer, with all three cases being significantly less than in St. Albert.

It should be noted, in reference to Table 12, p. 26, that the comparison urban municipalities, especially Leduc and Grande Prairie, collect significant tax revenue through special assessments and local improvement charges. These would increase the residential tax bill indicated in Table 16, but not to the extent of altering the main relationships. (In Sherwood Park, such additional tax levies are virtually non-existent.)

TABLE 16

Sherwood Park and Comparison Urban Municipalities, Property Tax Comparison 1982, in dollars

	Property A		
	Municipal	Supp. School	Total
Airdrie	525	260	785
Fort McMurray	480	280	760
Fort Saskatchewan	380	390[a]	770[a]
Grande Prairie	490	440	930
Leduc	300	270	570
Red Deer	520	440	960
St. Albert	790	460[b]	1250[b]
Spruce Grove	485	270[c]	755[c]
Sherwood Park	605	450	1055

Note: Property A is a standard single family bungalow of approximately 1200 sq. ft.
Supp. School Mill Rate used is that for the Public School System.

a: if separate school mill rate used, School taxes are $230 and total taxes are $610.
b: if separate school mill rate used, School taxes are $430 and total taxes are $1220.
c: if separate school mill rate used, School taxes are $320 and total taxes are $805.

Source: survey conducted by Urban Advisory Group.

Rural Comparison (See Table 17)

The rural comparison illustrates similar results as the urban one. Strathcona County acreage taxes are comparatively high in relation to the other municipalities, with farmland taxes being the highest of those municipalities sampled.

Note that acreage taxes (properties A and B) are the highest in Rocky View which has undergone a recent general assessment using the new rural assessment procedures. On the other hand, farmland taxes (properties C and D) are among the lowest in Rocky View.

TABLE 17

Strathcona County and Comparison Rural Municipalities,
Property Tax Comparison 1982, in dollars

	Property A			Property B			Property C			Property D		
	Mun.	School	Total	Mun.	School	Total	Mun.	School	Total	Mun.	School	Total
County Leduc #25	550	360	910	900	600	1500	220	145	365	460	300	760
County Parkland #31	420	400	820	750	710	1460	200	145	345	440	320	760
MD Foothills #31	540	900[b]	1440	720	1220[b]	1940	130	170[b]	300	210	280[b]	490
MD Rocky View #44	630	600	1230	1160	1115	2275	145	110	355	310	235	545
MD Sturgeon #90	410	480[a]	890[a]	600	705[a]	1305[a]	140	160[a]	300[a]	305	360[a]	665[a]
Strathcona County	600	450	1050	1275	950	2225	275	165	440	515	310	825

Note: Property A is a 1200 Sq. Ft. standard bungalow on a 3 acre parcel.
Property B is an 1800 sq. ft. bungalow with 2 car garage on a 20 acre parcel.
Property C is a quarter section of farmland with a 35 to 40 per cent soil rating.
Property D is a quarter section of farmland with an 80 to 85 per cent soil rating.

Supp. School Mill Rate used is that for the main public school system.

a: There are four different school divisions in MD of Sturgeon. Taxes shown are calculated for Sturgeon Division #24 at a mill rate of 69.50. The mill rates in the other school divisions are 37.00, 50.25 and 93.50.

b: Supplementary school mill rate in MD of Foothills doubled from 1981 to 1982; hence the high school taxes. Also, property D is 65% quality farmland which is the best in the municipality. Others are 80% + farmland.

Source: same as Table 16.

Municipal Tax Comparison

Table 18 shows municipal property tax level indicators for all the comparison municipalities and for Strathcona County. Municipal taxes do not include those collected for school or other requisitions.

The per capita tax level in Strathcona is about average in comparison with the rural municipalities, but it is among the highest of the per capita taxes for the urban centres. Of course, a large portion of the tax revenue in Strathcona and the other rurals, and in Fort Saskatchewan, is generated from industrial properties.

The percentage increase in the per capita tax level from 1976-81 for Strathcona is about average in relation to the comparison municipalities.

In terms of municipal taxes per $1000 equalized assessment, the Strathcona level is among the highest of the rurals, but is closer to the average in relation to the urban centres. The main exceptions are Fort McMurray and St. Albert where the tax effort is significantly greater.

TABLE 18

Strathcona County and Comparison Municipalities; Municipal Property Taxes per capita 1981, average annual per capita increase 1976-81, and taxes per $1000 equalized assessment

	$'s per capita 1981	Avg. annual increase in per capita 1976-81	$'s per $1000 equal. assess.
Airdrie	156	3.7%	37
Fort McMurray	323	13.2%	60
Fort Saskatchewan	397	28.1%	29
Grande Prairie	258	11.0%	39
Leduc	153	7.2%	27
Red Deer	181	9.9%	32
St. Albert	428	25.2%	77
Spruce Grove	202	8.2%	38
County Leduc #25	440	16.8%	40
County Parkland #31	358	7.0%	30
MD Foothills #31	233	4.1%	23
MD Rocky View #44	432	13.5%	31
MD Sturgeon #90	269	16.0%	30
Strathcona County 1981	386	15.1%	39
1982	373	11.8% (1976-82)	37

Source: Appendix Table 7A, p. A-24.

H. SUMMARY COMMENT

The purpose of this part of the report has been to provide a general background picture of Strathcona County and some basic comparisons with other municipalities.

The population and assessment data has been broken down into the urban (Sherwood Park) and rural components. The differences shown by the two components when compared with each other and with the entire county are significant, especially in regard to population growth and tax base structure. The comparisons with the sample urban and rural municipalities helps to put Strathcona and its components into some perspective, at least in terms of population and property.

The financial data has been presented only in terms of the entire county. Given the special urban/rural nature of Strathcona some of the data is not readily comparable with other Alberta municipalities, especially in terms of the relative importance of individual services. The tendency is for it to show that the county's operations are performed in a manner which is somewhere between the average for small city-size urban centres and that for rural jurisdictions near a major city. While that may be what one might reasonably expect, it is not of great use in making comparative evaluations about individual services.

Such evaluations require a detailed analysis of the county's municipal operations with particular emphasis upon the services provided in the different components of the county. As well, the results of such an analysis are required before any proper judgement can be made about the comparative debt and taxation levels.

MAIN REPORT

PART III - THE MUNICIPAL SERVICES

MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

PART III - THE MUNICIPAL SERVICES

The uniquely integrated urban/rural nature of Strathcona County is the critical factor affecting the evaluation of municipal operations, especially when comparisons are made with other municipalities. Urban municipal services are often very different from rural ones but it is only in the County of Strathcona where both types are extensively provided by a single municipal jurisdiction.

This part of the report examines in detail each municipal service provided in the county. Insofar as is possible, the benefits and costs of each service are evaluated in terms of the urban and rural components, and appropriate comparisons are made with the sample municipalities.

Certain services of Strathcona County are provided only to particular parts of the municipality. For example, sewage and water services and public transit pertain almost exclusively to the industrial and urban areas. Many other services are provided in terms of the entire county and the financial records are kept on that basis. Consequently, the urban/rural breakdowns presented for those services are estimates. Major assistance in calculating the breakdowns has been provided by administrative staff of the county.

The analysis presented is restricted to municipal services. Local education services are not examined (although the tax implications of education costs have been considered in Part II). Also, provincially-financed local services such as health clinics, hospitals and social welfare are not analysed.

Method of Presentation and Analysis

The first section of this part of the report establishes the general financial trends over the 1976-81 period, with particular regard for the expenditure patterns for the major service categories featured in the 1976 financial reporting system.

The expenditure data employed reflect the discounting of 'fiscal service' types of expenditure (transfers to other funds and reserves, bank charges, debt charges). The increasing (or decreasing) relative importance of the service (in per capita terms and in relation to equalized assessment) is assessed and comparisons are made with the sample municipalities. The main revenue trends are also indicated with particular regard for taxation, this being the main indicator of 'net cost' trends for municipal operations overall.

Subsequent sections examine individual municipal services. Each section comprises four main components:

1. Service Description: This explains what the service entails, what costs are included in the service, and how the service is provided.

2. Financial Analysis: This involves an examination of service revenue and expenditure features and an identification of net costs. In most cases the figures employed reflect the discounting of capital-related items and internal transfers. Whenever possible or

appropriate the 1981 and 1982 expenditures for Strathcona County are broken down into urban and rural costs.

Although the main comparison with sample municipalities is reserved for a separate sub-section, comparative financial data (for 1981 only) are also presented alongside the Strathcona figures.

3. Public Opinions: This component examines the public opinion poll data extracted from the 1979 Burton survey (see Appendix III). Levels of overall public satisfaction or dissatisfaction with service provision are examined as well as any significant differences according to life-style (urban, traditional rural, country estate residents) and electoral division (ED). The qualification noted earlier regarding the Burton studies (see page 8) should be borne in mind.

4. Comparative Analysis: Service Efficiency and Effectiveness: The analysis consists of separate comparative treatments of service level, cost and satisfaction, concluded by an assessment of comparative cost-efficiency (based on net cost and service level findings) and cost-effectiveness (based on net cost and service satisfaction findings).

Particular attention is given to comparisons between the Strathcona figures and the average for the four cities (4C) and the five rural municipalities (5RM). The comparisons are made on three levels: a) the County as a whole; b) in the context of Sherwood Park; and c) in the context of Rural Strathcona.

Each municipal service is examined in a separate section and most sections include a 'service evaluation' table. The table presents ratings of the service on a seven-point scale for Sherwood Park, the rural components and for the entire county. When examining these tables it should be kept in mind that the ratings for Sherwood Park are based upon what is considered 'average' in the comparison urban municipalities while ratings for the rural components are based upon what is considered 'average' in the comparison rural municipalities.

The final two sections of Part III consolidate the financial data of the individual services and examine staffing levels and the importance of contracted services.

A. MUNICIPAL SERVICE TRENDS

In this first section of Part III, the general trends in the levels of expenditure and revenues and the relative importance of the major services are examined. Comparative taxation levels are also presented, especially in regard to the residential tax component.

The time frame used is from 1976 to 1981 for all municipalities, with some 1982 data included for Strathcona County. Some of the data is discounted for inflationary factors. For that purpose the Canada Consumer Price Index from Statistics Canada is used. Average annual percentage increases are calculated using the formula presented in footnote 1, page 11.

For the comparison municipalities averages for the four cities (4C) and five rural municipalities (5RM) are presented. Detailed tabulations for all the municipalities separately are presented in Appendix II of this report.[1]

The expenditure and revenue data is that related to "general operating" functions. Capital account expenditures and revenues are not analysed since these fluctuate widely from year to year depending upon specific capital projects undertaken.

The service groupings are those employed in the old municipal financial reporting system which was used in 1976. School and other requisitions as well as utility operations (water, public transit) are examined in categories separate from those for "general municipal services."

The data for Strathcona County is presented only in terms of the total county. Subsequent sections of this Part III examine the rural/urban breakdown for specific services.

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[1] The four cities are Fort McMurray, Grande Prairie, Red Deer and St. Albert. The five rurals are County of Leduc, County of Parkland and the MDs of Foothills, Rockyview and Sturgeon.

Total General Operating Expenditures

Table 19 shows the average annual real increase (discounted for inflation) for the 1976 to 1981 period. The 16.3 per cent figure for Strathcona County is more than three times the average figures shown for the comparison cities and rural municipalities.

It should be noted that the 1982 per capita expenditure for Strathcona is less than in 1981 ($397 per capita in 1976 dollars) and that the average annual increase from 1976 to 1982 is 9.2 per cent.

Still, the basic conclusion is that the county's general operating expenditures increased in the late 1970's period at a rate significantly higher than comparable averages. The result is that while Strathcona had a per capita expenditure considerably less than the comparison municipalities in 1976, the opposite is true in 1981.

Table 20 (page 44) relates the operating expenditure to the tax base measured in equalized assessment terms. It shows, in effect, a rough measure of 'fiscal effort,' that is, the extent to which a municipality exploits its available property assessment resource. Due to changes over the years in the method of calculating equalized assessments the data shown is not comparable from year to year; but it is useful in comparing municipalities in the same year.

For a start, it should be noted that the fiscal effort of the 5RM is, in both 1976 and 1981, about one-half that of the 4C. This is not unusual. Per capita expenditures in urban and rural municipalities are generally similar (see Table 19) but per capita equalized assessments in rurals are generally much higher than urbans (see Appendix

TABLE 19

Municipal General Operating Expenditures, 1976 and 1981 in 1976 dollars per capita

	1976 $'s per capita	1981 $'s per capita (CPI adj.)*	Avg. Annual Increase 1976-1981
4C Average	317	401	4.8%
5RM Average	319	397	4.5%
Strathcona	234	498	16.3%

*1981 data is discounted for inflation. Consumer Price Index from Statistics Canada is 148.9 in 1976 and 236.9 in 1981. 1981 data is multiplied by 0.629 (148.9 ÷ 236.9) to represent it in 1976 dollar terms.

Note: Municipal general operating expenditures includes general municipal services only. Water, transit and other utilities are not included.

Source: calculated from Appendix II data.

TABLE 20

Municipal General Operating Expenditures, 1976 and 1981 in dollars per $1000 equalized assessment (EA)

	1976 $'s per $1000 EA	1981 $'s per $1000 EA
4C Average	144	111
5RM Average	77	55
Strathcona	64	79

Source: same as Table 19.

Table II-2A, p. A-9, for examples). That is due primarily to the large land area and pipe and power and industrial assessment concentrations in rural areas.

In regard to Strathcona County, note that the fiscal effort in 1976 is less than the 5RM average. That is consistent with the per capita expenditure comparisons for that year (see Table 19). In 1981, the county's fiscal effort is some 40 per cent higher than the 5RM average and it lies roughly between that of the 4C and 5RM averages. The increased fiscal effort of Strathcona is consistent with the increased per capita expenditure. And the level of the effort in relation to that for the urban and rural comparisons illustrates the urban/rural nature of the county.

General Operating Expenditures by Major Service Groups

Table 21 (page 46) shows the relative importance and level of expenditure for the major service groupings for 1976 and 1981. There are several matters worthy of note.

Firstly, there are differences among the different types of municipalities in the percentage of expenditure represented by the services. For both years shown, the 4C figures show a greater percentage of expenditure than the 5RM in the services of general government, protection, waste and sewage, health and welfare, and recreation and culture. Debt charges also show a high percentage.

On the other hand, the 5RM show that transportation accounts for well over 50% of expenditures and that development services

TABLE 21

General Operating Municipal Expenditures by Major Service Groups, as a per cent of Total and in 1976 dollars per capita, for 1976 and 1981

	General Govern-ment		Protec-tion		Transpor-tation		Waste & Sewage		Health & Welfare		Develop-ment		Recreation & Culture		Debt Charges		Transfers to own funds		TOTAL Per Cap.
	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	
4C Average																			
1976	13.2	42	17.4	55	17.8	56	6.5	21	3.9	12	1.2	4	13.4	42	14.2	45	12.2	39	317
1981*	12.0	48	18.1	73	17.0	68	5.5	22	2.4	10	1.2	5	11.9	48	9.8	39	22.2	89	401
5RM Average																			
1976	9.6	31	2.2	7	57.0	182	0.5	2	0.9	3	5.7	18	3.2	10	7.2	23	13.8	44	319
1981*	9.6	38	3.1	12	56.8	225	0.6	2	0.3	1	4.8	19	2.8	11	4.7	19	17.4	69	397
Strathcona																			
1976	11.0	26	9.8	23	39.2	92	4.3	10	0.9	2	2.4	6	15.0	35	8.6	20	9.0	21	234
1981*	10.8	54	7.2	36	35.3	176	3.4	17	1.8	9	1.3	6	13.2	65	2.7	13	24.3	121	498

* 1981 per capita figures shown are discounted for inflation to express them in 1976 dollar terms. See note to Table 19 for explanation of method.

Note: may not add to TOTAL due to rounding.
Source: calculated from Appendix II tables. Also see Appendix Tables II-6 to II-61 for explanation of what is included in each major service group.

(which includes agricultural service boards) is more important than in the urbans.

In reference to Strathcona County it can be noted that with the sole exception of recreation and culture, the percentages represented by services lie between those for the 4C and the 5RM. The 'service' category of 'transfers to own funds' is the only one in which there is no great difference among the municipalities tabulated.

Secondly, in reference to the differences within the three municipal groupings from 1976 to 1981, note that the 'transfers to own funds' is the only category showing a noticeable increase in the percentage of expenditure and 'debt charges' is the only category showing a noticeable decrease.[1]

Most other categories show a slight drop or no change in the percentage expenditure from 1976 to 1981, due primarily to the large increases in the percentage represented by 'transfers to own funds.' Exceptions are protection services in the 4C and 5RM and health and welfare in Strathcona County.

Thirdly, in reference to the per capita data (1981 figures are expressed in 1976 dollar terms), note that almost all categories in the three municipal groups illustrate an increase in the level of expenditure. The only exceptions are debt charges in all three groups; recreation and culture, health and welfare and waste and sewage in the 5RM; health and welfare in the 4C; and development in Strathcona.

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[1] Due largely to the $1 billion distributed by the provincial government in 1979 under the Municipal Debt Reduction Program.

Table 22 more clearly illustrates the increases in the per capita expenditure levels. The average annual real increases, that is, discounted for inflation, are shown. In virtually all major service categories, the figures for Strathcona County are quite different from either those for the 4C or 5RM.

The county data indicate, in comparison with the other groupings, major increases in expenditure levels for general government, transportation, waste and sewage, and recreation. Large increases are also evident for health and welfare but that service represents only 1.8 per cent of total expenditures. The increase in 'transfers to own funds' is much higher than the 4C and 5RM averages but amounts transferred fluctuate from year to year.[1]

In order to put these apparently large increases into perspective, refer to Table 23. The data there shows the 'fiscal effort' related to each service grouping. Despite the large percentage increases shown in Table 22, the 'fiscal effort' data indicates no abnormal strain upon tax resources for any of the services in Strathcona County.

In particular, the 1981 figures for general government, protection, transportation, waste and sewage, health and welfare and recreation all show Strathcona lying between the 4C and 5RM averages. For all of those services, except transportation, the county 'fiscal effort' is less than the 4C averages in spite of the fact that the county's per capita expenditures for 1981 (discounted for inflation) are higher than the 4C average for general government and recreation and are only slightly less for waste and sewage and health and welfare (see Table 21, p. 46).

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[1] In particular see the section on Transportation. In excess of $1.8 million was received from development levies in 1981 and added to reserve funds.

TABLE 22

Average Annual (Real) Percentage Increase in per capita Operating Expenditures, by major service groupings, 1976 to 1981

	Avg. Per Cent Increase 1976-81		
	4C Average	5RM Average	Strathcona County
General Government	2.7	4.2	15.7
Protection	5.8	11.4	9.4
Transportation	4.0	4.3	13.9
Waste and Sewage	0.9	0.0	11.2
Health and Welfare	-3.6	-19.7	35.1
Development	4.6	1.1	0.0
Recreation and Culture	2.7	1.9	13.2
Debt Charges	-2.8	-3.7	-8.3
Transfers to Own	17.9	9.4	41.9
TOTAL	4.8	4.5	16.3

Source: from Table 21. Note that 1981 per capita figures are discounted for inflation.

TABLE 23

General Operating Municipal Expenditures by Major Service Groups, in dollars per $1000 Equalized Assessment (EA) 1981

	$'s per $1000 EA		
	4C Average	5RM Average	Strathcona County
General Government	13	5	9
Protection	20	2	6
Transportation	19	31	28
Waste and Sewage	6	0.3	3
Health and Welfare	3	0.2	1.4
Development	1	3	1
Recreation and Culture	13	2	10
Debt Charges	11	3	2
Transfers to Own	25	9	19
TOTAL	111	55	79

Note: may not exactly add to TOTAL due to rounding.

Source: same as Table 21.

On the other hand, the county's 'fiscal effort' for all services except transportation and development is higher than the 5RM averages in 1981. Again, this result is not unexpected given that the rural municipalities are more strictly rural and agricultural than Strathcona.

The fiscal effort data shown in Table 23 can also be related to the per capita assessment data discussed in Part II (see pages 17 to 19). Strathcona County has an assessment level which is high compared to urban centres but which is less than average compared to rural municipalities. The result, as Table 23 shows, is a fiscal effort for almost all services and in total which is greater than the 5RM but less than the 4C averages.

General Operating Revenues

The general municipal operating revenues are those collected (or received) to pay for the general operating expenditures examined above.

Table 24 (p. 52) shows the revenue data for 1976 and 1981 in seven major categories. In terms of the percentage of total represented by each category, note that 'municipal property taxes' are more important in the rurals than in the cities, while 'special assessments, local improvements and business taxes' as well as 'sales of goods and services' and 'transfers from own funds' are more important in the cities than in the rurals. The importance of 'other own source revenue' and the two 'grants' categories is roughly the same in each group.

TABLE 24

General Operating Municipal Revenues by Major Revenue Category, as a per cent of Total and in 1976 dollars per capita, for 1976 and 1981

	Municipal Property Taxes		Sp. Assess.; Local Improvement; Business		Sales of Goods & Services		Other Own Source Revenue		Uncon-ditional Grants		Con-ditional Grants		Transfers from own Funds		TOTAL
	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	%	per cap.	per cap.
4C Average															
1976	43.0	138	5.9	19	11.5	37	14.6	47	7.2	23	9.7	31	8.1	26	321
1981*	41.1	181	3.4	15	10.5	46	20.2	89	6.4	28	7.7	34	10.9	48	440
5RM Average															
1976	64.9	207	0.06	0.2	5.0	16	8.2	26	10.0	32	9.7	31	1.9	6	319
1981*	54.3	222	1.3	5.3	3.9	16	20.8	85	5.4	22	13.7	56	0.7	3	409
Strathcona															
1976	68.2	191	0.07	0.2	8.2	23	12.1	34	5.7	16	5.7	16	nil	nil	280
1981*	47.3	243	0.04	0.2	14.0	72	15.8	81	3.3	17	5.1	26	14.4	74	514

* 1981 per capita figures shown are discounted for inflation to express them in 1976 dollar terms. See note to Table 19 for explanation of method.

Note: may not add to TOTAL due to rounding.
Source: calculated from Appendix II tables. See Appendix Tables II-7 to II-7G for explanation of what is included in each major revenue category.

With respect to Strathcona County, it may be noted that 'sales of goods and services' and 'transfers from own funds' represent a greater percentage of the total than the urban and rural averages shown, at least for 1981. Also, both 'grants' categories are less important than either the cities or rurals while 'municipal property taxes' show a percentage (for 1981) lying between that of the averages of the 4C and 5RM.

In regard to the changes in percentages from 1976 to 1981, the 'municipal property taxes' and 'unconditional grants' categories show a decline for all three groups while the 'other own source revenue' category shows an increase.

Strathcona County departs from the average trends in the 'sales of goods and services' category with a significant percentage increase. In regard to 'conditional grants,' the county emulates the 4C average by showing a percentage decline. It is also similar to the 4C average in the 'transfers from own funds' category by showing a percentage increase.

In terms of the per capita levels of revenue, Strathcona in 1981 is higher than both group averages in 'municipal property taxes,' 'sales of goods and services' and 'transfers from own funds.' On the other hand, it is significantly lower in the two 'grants' categories.[1]

Table 25 (p. 54) shows the average annual percentage changes in per capita levels from 1976 to 1981 (with 1981 figures discounted to 1976 dollar terms).

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[1] The low level of grants for the county is examined in later sections, especially under Transportation and in Part IV of this report.

TABLE 25

Average Annual Real Percentage Increase, in per capita Operating Revenues, by major revenue category, 1976 to 1981

	Avg. Per Cent Increase 1976-81		
	4C Average	5RM Average	Strathcona County
Municipal Property Taxes	5.6	1.4	4.9
Spec. Assess., Local Imp., Business	-4.6	92.6	0.0
Sales of Goods and Services	4.5	0.0	25.6
Other Own Source Revenue	13.6	26.7	19.0
Unconditional Grants	4.0	-7.2	1.2
Conditional Grants	1.9	12.6	10.2
Transfers from Own	13.0	-12.9	n.c.
TOTAL	6.5	5.1	12.9

Source: from Table 24. Note that 1981 per capita figures are discounted for inflation.

n.c.: not calculable. Amount in 1976 was nil.

The three groupings shown illustrate little similarity. Strathcona is near the 4C averages in only the 'municipal property taxes' category and near the 5RM averages in only the 'conditional grants' category. In the 'other own source revenue' category, Strathcona lies between the 4C and 5RM averages. The county shows a much greater increase in 'sales of goods and services' than the two average groupings. Total revenues as well indicate a larger rate of increase for Strathcona, corresponding to the total expenditure increase discussed earlier.

Property Taxation

In this sub-section, per capita levels of property taxation in 1976 and 1981 are examined. Particular attention is paid to the level of property taxes derived from residential and farm properties.

Taxes examined include municipally-levied property taxes, including planning and health requisitions. Supplementary school taxes are also analysed. The school foundation requisition, which is standard throughout the province and which does not apply to residential or farm properties, is not examined.

Table 26 shows the per capita taxation levels (expressed in 1976 dollars) for 1976 and 1981. Firstly, note that total tax levels for municipal and school supplementary are higher in the 5RM than in the 4C. This, of course, relates to the higher assessment levels in rural municipalities than in the urbans and the greater reliance upon tax revenue in the rurals (see Table 24, page 52). On the other hand, the tax levels related to the residential component are mostly lower

TABLE 26

Per Capita Municipal Taxation Levels 1976 and 1981, in 1976 dollars per capita

		1976 dollars per capita		
		4C Average	5RM Average	Strathcona County
Total Municipal	1976	118	179	188
	1981	135	191	227
Municipal from Residential	1976	86	81	86
	1981	97	87	108
Total School Supplementary	1976	59	81	67
	1981	95	147	130
School Supp. from Residential	1976	44	41	30
	1981	69	73	71

Note: 1981 per capita figures are discounted for inflation. See note to Table 19 for explanation of method.

Residential includes farm properties.

Figures do not include grants-in-lieu of taxation.

Supplementary taxes calculated using main public school mill rate.

Source: calculated from financial assessment and population data from Municipal Financial Statements.

in the rurals than in the urbans. This is due to the high percentage of non-residential property in the rurals as compared to most urban centres.

Secondly, notice that the municipal tax levels in Strathcona County, in total and for the residential component, are higher than either the 5RM or 4C. This corresponds to the higher than average taxation on sample properties noted in Part II of this report (see pages 32 to 34). The school supplementary tax levels in Strathcona, however, lie between those of the 4C and 5RM averages. Note that in 1981 there is very little difference among the three figures for school supplementary taxes from the residential component.

Table 27 shows the average annual percentage increase in the per capita tax levels (expressed in 1976 constant dollars). In regard to the municipal taxes, Strathcona County is higher than the 4C and 5RM and the percentage increase in the residential component of municipal taxes is somewhat larger than that for total municipal taxes. The higher than average tax increases correspond to the increases noted earlier in regard to expenditures, especially in the services of general government, transportation and recreation. (Also see section A of Part IV where these increases are discussed far more fully.) The larger increase in the residential tax component is primarily due to the fact that Strathcona's residential tax base has grown more rapidly than the non-residential. In 1976 residential property represented 45 per cent of the county's tax base; in 1981 it represented 54 per cent.[1]

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[1] Residential tax collections increased more rapidly than non-residential despite the use by Strathcona in 1981 of a split mill rate. Other municipalities in the average samples that used a split mill rate are Grande Prairie, Red Deer, Parkland County, MD of Foothills and the MD of Rockyview.

TABLE 27

Average Annual Real Percentage Increase in Municipal Per Capita Taxation Levels, from 1976 to 1981

	Per Cent Increase 1976-81		
	4C Average	5RM Average	Strathcona County
Total Municipal	2.7	1.3	3.8
Municipal from Residential	2.4	1.4	4.7
Total School Supplementary	10.0	12.7	14.2
School Supp. from Residential	9.4	12.2	18.8

Source: see Table 26.

In regard to the school supplementary taxes, the percentage increases for Strathcona are higher than the 5RM or 4C averages. That is due, however, to the initially low level of taxation in 1976. As Table 26 shows the per capita levels for school supplementary taxes in Strathcona are less than the 5RM average.

Water and Public Transit Expenditures

Table 28 shows the water utility operating expenditure data for 1976 and 1981. Systems operating in the three rural municipalities are not really comparable with Strathcona since none of them service a major urban concentration. Strathcona in comparison with the 4C shows a large increase in expenditure to 1981. The 4C in fact show a decrease in expenditure with the 1981 data discounted for inflation. The reasons for the increase in Strathcona are examined in detail under the water service section of this part of the report.

TABLE 28

Water Utility Operating Expenses in 1976 dollars per capita and Average Annual Percentage Increase, 1976 to 1981

	1976 $'s per capita	1981 $'s per capita	Avg. Per Cent Increase 1976-81
4C Average	49	38	-5.0
3RM Average*	4	18	35.1
Strathcona County	39	61	9.4

*: only 3 of the 5 rural municipalities operated a water service.

Note: 1981 data discounted for inflation. See Table 19 for explanation.
Source: see Appendix Table II-9, p. A-32.

All four cities and Strathcona County had some expenditure on public transit systems in 1981. Trends from 1976 are not relevant here, however, because two of the cities did not operate transit systems in 1976 and the services in St. Albert and Strathcona have undergone considerable change since 1976. Transit expenditures are examined in a later section of this part of the report.

Section Summary

This first section of Part III has reviewed the trends in operating expenditures and revenues and levels of taxation from 1976 to 1981. In comparison with the four cities (4C) and five rural municipalities (5RM) averages, Strathcona county shows the following:

- a high percentage increase in total operating expenditures;
- a fiscal effort (measured as expenditure per $1000 equalized assessment) for 1981 which is less than the 4C but greater than the 5RM;

- a percentage of total expenditure for all major services except recreation which lies between the 4C and 5RM averages;
- a percentage of expenditure on recreation which is higher than the other municipal averages;
- large increases from 1976 to 1981 in expenditures on general government, transportation, waste and sewage and recreation;
- a fiscal effort by major services which is generally higher than the 5RM but less than 4C (consistent with assessment levels noted in Part II of this report);
- a percentage of operating revenues by major categories which is considerably different than either the 4C or 5RM averages, especially in regard to 'sales of goods and services' and 'transfers to own funds' which are more important; and in regard to 'grants' which are less important;
- a higher than average municipal tax level, but a tax level for supplementary school requisitions which is near the sample averages;
- a higher than average increase from 1976 to 1981 in taxation levels, especially in taxes generated from residential properties; and
- a large increase in water utility operating expenditures.

In brief, the data indicate a municipal operation which is considerably different than the sample averages and which has shown a relatively high expenditure increase from 1976 to 1981, financed by increases in revenues from property taxation and sales of goods and services.

It may be noted for Strathcona County that overall expenditure levels decreased from 1981 to 1982. A major part of the decrease was due to changes in internal accounting procedures. These and other financial aspects are examined in detail for each major service category in following sections of this report.

B. GENERAL GOVERNMENT

The general government category includes legislative and administrative expenses associated with the overall operation and management of the county. The information presented here deals with the municipal component of the county. Expenses pertaining to the school operations of the county are not included.

The legislative expenses in the general government service category are fairly straightforward. These include the renumeration provided to members of the county council plus travel and other expense allowances.

The expenses included in the administrative component of general government are more complex. What is included under the general government category depends largely upon how the municipal accounting and cost allocations are organized. For most municipalities, the expenses for the senior administrative officials are included as are the costs associated with staff salaries and operating expenses for the municipal office.

Other costs included are those pertaining to assessment, tax collections and billings, elections and plebiscites, printing and other communications. Consulting expenses and those for general reports and studies are special costs normally included as general government expenses. These costs have been inflated in recent years in Strathcona County due to annexation-related studies. In Strathcona County the maintenance costs of all municipal buildings are included as general government expenses, as are some inspection services and municipal planning and development.

The general government expenses are analysed below in three basic categories: total general government, legislative component, and administrative component.

Financial Analysis

The data presented is 1981 for all municipalities and 1981 and 1982 for Strathcona County. Most of the data is given in dollars per capita terms or dollars per $1000 equalized assessment to enable comparisons among the municipalities to be made.[1]

Total General Government

Table 29 shows total general government expenditures and revenues in dollars per capita. The County of Strathcona illustrates some major increases from 1981 to 1982.

The legislative function, which includes payments to councillors and office and general service expenses associated with the council, shows Strathcona near the figures for other municipalities. The legislative expenses are analysed in further detail below.

Under the administration staff salaries column, Strathcona is roughly average, especially in comparison with the cities, in 1981. But the 1982 figures show a major increase to $61 per capita from $39

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[1] Throughout this section and subsequent ones of Part III and IV the data presented is as follows: (1) "gross operating expenditures" refers to the total expenditure minus internal transfers or fiscal service types of expenditure (that is, from financial statement page FR19, total function operating expenditures minus codes 761, 762, 763, 764, 810, 820, 830, 960 and 990). The gross expenditure data generally conforms to that presented in Appendix II. There may be some slight variations due to the different categorization of services. (2) "Operating revenues" refers to the total revenues minus internal revenue transfers (that is, from financial statement page FR19, total function operating revenues minus codes 550, 910, 920, 930, 940, 960 and 990). (3) "Net operating expenditures" (or net cost) refers to the gross operating expenditure minus the operating revenues described above.

TABLE 29

General Government Expenditures and Revenues, in dollars per capita, 1981
(and 1982 for Strathcona)

	Gross Expenditures					
	Legislative Function	Administration Staff Salary*	Other Expenses	Total Gross Expenditure	Operating Revenues	Net Expenditure
Town of Airdrie	11	26	41	79	9	70
Town of Ft. Sask.	5	23	21	49	4	45
Town of Leduc	6	26	41	73	19	54
Town of Spruce Grove	5	50	32	87	26	61
City of Ft. McMurray	5	52	12	69	3	66
City of Grande Prairie	7	31	16	54	1	53
City of Red Deer	4	43	30	77	43	34
City of St. Albert	4	67	28	99	41	57
4 City Average	5	48	23	76	26	50
County of Leduc	11	41	24	76	13	63
County of Parkland	5	31	18	53	20	33
MD of Foothills	6	19	17	42	27	15
MD of Rockyview	9	26	44	79	2	77
MD of Sturgeon	10	22	21	53	15	38
5 RM Average	8	28	25	61	15	46
Strathcona County 1981	4	39	42	86	34	52
1982	7	61	40	107	30	77

Note: see footnote, page 62, for description of revenues and expenditures.
*: Code 100 from page FR19 on statements.
Source: Financial Statements; Population from Appendix Table II-1 p. A-7.

per capita, an increase of almost $1 million. The reasons for this relate to changes in accounting procedures between 1981 and 1982 as well as some staff increases.

Firstly, in 1982 all costs for data processing and purchasing were included while in 1981 one-half of those costs were accounted as county school operation expenses. The expense increase amounted to over $400,000 in wages, salaries and benefits. Secondly, five staff members (roughly $120,000) in financial services were charged as general government expenses in 1982. The previous year they were accounted as school operation expenses.

Thirdly, in 1982 the new commission structure for the county's administration was in place with two new commissioners and increased secretarial support staff. Salary and benefit expenses were in excess of $120,000. As well, the amalgamation of the recreation services (see Section P) resulted in one administrative position being moved to the general government function in 1982.

These accounting changes and staff increases accounted for about three-quarters of the 1981 to 1982 increase. Another $65,000 was due to expenses of the general assessment undertaken in 1982. The remaining $200,000 of the $1 million increase was due to wage, salary and benefit increases.

The 'other expense' column in Table 29 includes primarily general services, materials, goods, supplies and utilities expenditures. Also included are grants to individuals and organizations. The per capita figures for Strathcona are higher than the sample averages and higher than all municipalities except the MD of Rockyview. The reason is that the county includes expenses for the maintenance of all municipal buildings in the general government function. Most other municipalities include only the maintenance expenses of the main municipal office building.

The total gross expenditure for the county in 1981 is somewhat higher than the comparison municipalities due to the allocation of building maintenance costs discussed above. The 1982 figures show a significant increase (from $86 to $107 per capita) due mainly to the total staff salary increase.

Operating revenues in the general government category are higher on a per capita basis than all the comparison municipalities except Red Deer and St. Albert.[1] In 1981 this is due to significant revenue from licences and permits. In 1982 most of that revenue is allocated to specific service functions. But in 1982 the revenue from 'sales of goods and services' increased by 75 per cent due to the "charge back" of purchasing, data processing and financial services to the school operation.

The per capita net expenditure figures shown in Table 29 indicate that in 1981 the county was very near the 4C and 5RM averages with four of those nine comparison municipalities having a higher per capita expenditure than Strathcona County. In 1982 the county's per capita expenditure jumps by 50 per cent with most of the increase due to staff expense accounting changes.

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[1] Those revenues likely include interest stabilization grant money. That grant has been discounted for Strathcona County.

Legislative Component

Table 30 provides some data pertaining to the legislative expense component of the general government service. The net expenditure, in per capita terms and in terms of fiscal effort (dollars per $1000 EA), shows the county in both 1981 and 1982 at a level somewhat lower than most of the comparison municipalities.

Notice also that the proportion of the net expenditure due to councillor pay in Strathcona is less than most of the rural municipalities. In four of the five rural jurisdictions councillor pay represents 100% of the net expenditure and the level of that expenditure is still higher than in Strathcona.

The average payment per councillor for 1981 in Strathcona is higher than all but two of the comparison municipalities. The average payment increases by 35 per cent in 1982.[1] Nevertheless, the level of net expenditure for the county remains below the comparison averages.

Administration Component

Table 31 shows the levels of net expenditure for the administration component of the general government service. The per capita expenditure in Strathcona County for 1981 is higher than both the 4C and 5RM averages but the $48 per capita is not out of line especially in comparison with Fort McMurray, the County of Leduc and the MD of Rockyview.

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[1] There is one less council member in Strathcona in 1982 due to areas lost by annexation.

TABLE 30

Legislative Component Net Expenditures in dollars per capita and per $1000 Equalized Assessment (EA); and Per Cent of Net Expenditure due to Councillor payments and Average Councillor Payment, 1981 (and 1982 for Strathcona)

	Net Expenditure $'s per cap.	Net Expenditure $'s per $1000 EA	Per Cent of Net due to Councillors Pay.*	Avg. Payment per Councillor*
Town of Airdrie	11	3	55 %	$ 7,329 (7)
Town of Ft. Sask.	5	0.4	93 %	$ 8,676 (7)
Town of Leduc	6	1	86 %	$ 9,686 (7)
Town of Spruce Grove	5	1	61 %	$ 4,706 (7)
City of Ft. McMurray	5	0.9	71 %	$ 15,008 (7)
City of Grande Prairie	7	1	44 %	$ 7,842 (9)
City of Red Deer	4	0.6	69 %	$ 12,644 (9)
City of St. Albert	3	0.6	71 %	$ 10,902 (7)
4 City Average	4	0.8	63 %	$ 11,429
County of Leduc	11	1	100 %	$ 14,440 (8)
County of Parkland	5	0.4	100 %	$ 17,636 (7)
MD of Foothills	6	0.6	100 %	$ 8,027 (7)
MD of Rockyview	9	0.7	73 %	$ 16,223 (7)
MD of Sturgeon	10	1	100 %	$ 19,805 (8)
5 RM Average	8	0.7	93 %	$ 15,329
Strathcona County 1981	4	0.4	76 %	$ 17,572 (9)
1982	6	0.6	65 %	$ 23,817 (8)

Note: see footnote, page 62, for explanation of net expenditure.

*: includes salaries or fees and mileage and subsistence expenses only for mayor/reeve and other councillors. Number in brackets indicates total members on council.

Source: Financial Statements.

TABLE 31

Administration Component Net Expenditures in dollars per capita and per $1000 EA; 1981 (and 1982 for Strathcona)

	Net Expenditure $'s per cap.	Net Expenditure $'s per $1000 EA
Town of Airdrie	58	14
Town of Ft. Sask.	40	3
Town of Leduc	47	12
Town of Spruce Grove	56	10
City of Ft. McMurray	62	12
City of Grande Prairie	46	7
City of Red Deer	30	5
City of St. Albert	54	10
4 City Average	46	8
County of Leduc	53	5
County of Parkland	28	2
MD of Foothills	8	4
MD of Rockyview	68	5
MD of Sturgeon	28	6
5 RM Average	38	3
Strathcona County 1981	48	5
1982	71	7

Note: see footnote, page 62, for explanation of net and gross expenditures.

Source: Financial Statements. Population and Assessment data from Appendix Tables II-1 and II-2, pages A-7 and A-8.

The fiscal effort for the service in Strathcona is similar to four of the five rural comparisons and is less than all urbans except Red Deer and Fort Saskatchewan.

The 1982 per capita figure rises to $71 per capita which is in excess of a 45 per cent increase. But that level is still within the range of the comparison municipalities. Remember also that the county's population dropped in 1982 due to annexation. About 12 per cent of the 1981 to 1982 increase in the per capita data is attributable to a lower population. The fiscal effort in 1982 remains less than most of the urban centres.

Office Staff Considerations

Data presented in Table 32 shows that Strathcona County had a comparatively low level of full-time office staff per 1000 population. The figure of 2.9 is not as low as that for the conventional rural municipalities and three of the four towns, but it is lower than the cities and the County of Parkland. Inclusion of part-time staff would not alter the pattern.

The Strathcona data illustrates its integrated urban/rural structure. It would appear that the structure enables some economies of scale in the area of general administration. If the 4C average is applied to Sherwood Park's population and the 5RM average to the population of the rest of the county, the number of office staff per 1000 population in 1981 would be 3.20.

In 1982 the number of staff increased slightly despite the loss of territory and population as a result of annexation. The staffing

TABLE 32

Office Staff Numbers and number per 1000 population, 1981 (and 1982 for Strathcona)

		Full-Time Office Staff		Part-Time Office Staff
		No.	per 1000 pop.	No.
Town of Airdrie		4	0.5	-
Town of Ft. Sask.		36	3.0	-
Town of Leduc		49	4.0	41
Town of Spruce Grove		3	0.3	-
City of Ft. McMurray		130	4.2	-
City of Grande Prairie		87	3.6	3
City of Red Deer		150	3.3	6
City of St. Albert		106	3.4	4
4 City Average		118	3.6	3
County of Leduc		20	1.8	2
County of Parkland		111	4.4	9
MD of Foothills		10	1.1	-
MD of Rockyview		30	1.8	-
MD of Sturgeon		31	1.9	1
5 RM Average		40	2.6	2
Strathcona County	1981	145	2.9	-
	1982	150	3.1	10

Source: Financial Statements. Population used from Appendix Table II-1, p. A-7.

level increased to 3.1 per 1000 population due mostly to the decline in total population. Assuming that staff levels were adequate in 1981 and 1982, it is probable that the losses in the annexation would enable the county to avoid, or keep to a minimum, office staff increases over the next few years. (See page 341 regarding overall staffing levels and the significance of contracted services.)

Public Opinion

The Burton survey data tabulated in Appendix III includes responses to questions on overall satisfaction with the county management and opinions on the representativeness of the county council. (See Appendix Tables III-2 page A-51, III-4 page A-57 and III-5 page A-58.) For both questions, the responses indicate a high level of satisfaction.

In regard to county management, about 55 per cent of all respondents were "generally satisfied" compared to 11 per cent "generally dissatisfied." Rural (that is, farm) residents indicated the highest level of satisfaction while the Estates (that is, country-residential) residents were slightly less satisfied.

In terms of responses by electoral division (ED), residents of ED3, in the south-east corner of the county responded least favourably with 49.5 per cent "generally satisfied" and 19.8 per cent "generally dissatisfied." ED4, in the centre of the county north of Sherwood Park, responded most favourably with 64.2 per cent "generally satisfied" and only 6.6 per cent "generally dissatisfied."

The opinions on the representativeness of county council showed 63 per cent responding "generally representative" and 19.5 per cent responding "generally unrepresentative." The Rural residents again responded most favourably with 87 per cent answering "generally representative" compared to 61 per cent for the Urban (that is, Sherwood Park) residents. The Rural residents also had a much lower percentage giving "no response," 1.5 per cent, compared to Urban and Estate residents, around 18 per cent.

The responses of "generally representative" by ED showed three of the four Sherwood Park EDs--6, 7 and 9--with the lowest percentages at 57 to 59.5 per cent while the rural EDs 4 and 5 (north part of county) had the highest at about 70 per cent.

Service Efficiency and Effectiveness Comparisons

The general government service is one of the major ones in terms of its percentage of operating expenditures - 11 per cent in 1981 and nearly 20 per cent in 1982. The county administration accounts for the bulk of general government services with the legislative component representing less than 10 per cent of the net expenditure. Table 33 summarizes the comparisons with the 4C and 5RM.

Legislative Component

The 1979 Burton survey data showed that county residents were then generally satisfied with the county management and with the representativeness of the council. This was particularly true for the Rural

TABLE 33

General Government Service Comparisons; 4C average, 5 RM average and Strathcona County 1981

	4C Average	5 RM Average	Strathcona County
Average Payment Per Councillor	$11,429	$15,329	$17,572
Legislative Net Expenditure			
- $'s per capita	4	8	4
- $'s per $1000 EA	0.8	0.7	0.4
Administration Net Expenditure			
- $'s per capita	46	38	48
- $'s per $1000 EA	8	3	5
Full-Time Office Staff per 1000 population	3.6	2.6	2.9

Source: see Tables 30, 31 and 32.

(farm) residents. The council appears to be meeting the needs of county residents and it is also giving them good value for the money spent.

The financial analysis showed for 1981 that the payment per councillor in Strathcona ($17,572) was among the highest of all municipalities and higher than the 5RM average ($15,329) and the 4C average ($11,429). Nevertheless, the net expenditure per capita in Strathcona is no greater than the 4C average and it is only one-half the 5RM average. Also, the expenditure per $1000 EA was considerably lower than either of the averages (see Table 33).

In Strathcona one council is simultaneously governing both an urban and rural area which elsewhere would be governed by two separate councils yet the fiscal effort and per capita expenditures required are comparatively low. The financial analysis and resident survey data leads to the conclusion that the legislative component of general government is characterised by high efficiency and effectiveness.

Administration Component

General government administration is a difficult service to evaluate in comparison with other municipalities. The accounting procedures may be different from one municipality to another and even from year to year in the same municipality. There often are differences in the type of staff included, the functions undertaken and the types of revenues collected. There is the basic similarity in that the service covers the fundamental costs of municipal administration, but financial comparisons should be qualified.

The net expenditure data (see Table 33) shows Strathcona with a per capita expenditure slightly higher than the 4C average and considerably higher than the 5RM average. In terms of net expenditure per $1000 EA, the county lies between the two municipal averages, being higher than the 5RM and lower than the 4C. Strathcona is in the same comparative situation with regard to office staff per 1000 population.

The expenditures associated with the annexation hearings have been estimated at $3 million over the 1979-81 period. If an allowance is made for some of these costs accruing in 1981 the actual administration operating expenses would likely be less than the 1981 data indicates. That would at least put the per capita expenditure level nearer the 4C average.

The resident survey data of 1979 showed a high level of satisfaction with the overall county management. But the survey was conducted when annexation by Edmonton loomed as a real threat. The stated satisfaction may have been made in conjunction with the overwhelming opposition to administration by the City of Edmonton.

Since 1981 considerable change has been made in the administration structure and accounting procedures. The per capita net expenditure in 1982 ($71) is some 45 per cent higher than in 1981 but most of the increase is due to financial re-organizations.

It is apparent that the county has been giving the administration function special and close attention in recent years. This effort appears to have been prompted by both the economic recession and annexation-related factors shocking the county out of its comparative affluence and relative complacency of earlier years. Also, as Sherwood Park has grown and matured it has required the basically rural administration structure to cope with increasingly complex urban matters. The recent changes undertaken have probably brought the service level of general administration nearer to where it ought to be.

The comparative data, such as it is, indicates that rural residents of the county are receiving an above average level of service in comparison with their counterparts in other rural municipalities and that has probably been the case for several years. By contrast, Sherwood Park residents may have received a service level below average in comparison with other urban centres until quite recently. This speculation is based primarily upon the low ratio of office employees to population in comparison with the four cities.

It is unlikely that the county will expand its office staff in the near future. The county is smaller in area and population now than it was in 1981 and expenditure restraints are being implemented. That being the case, the present emphasis by the county upon efficient and stream-lined administration is prudent. The effectiveness of these changes and the public evaluation of the current administration service cannot be assessed at this time; however, the changes auger well in terms of financial considerations and they should enable the county to keep administrative expenses in line with those of other municipalities.

The service evaluation is summarized in Table 34 along with that for the legislative component. Essentially, the legislative component is rated above average while the administration component is rated as average with the qualifications noted above kept in mind.

TABLE 34

General Government Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Legislative Service			
Level	Average	Average	Average
Cost	Below Average	Low	Below Average
Satisfaction	Above Average	High	Above Average
Efficiency	Above Average	High	High
Effectiveness	High	Very High	High
Administration Service			
Level	Average	Above Average	Average
Cost	Average	Above Average	Average
Satisfaction	Average	Average	Average
Efficiency	Above Average	Average	Average
Effectiveness	Average	Average	Average

Note: Possible ratings are:
Very High
High
Above Average
Average
Below Average
Low
Very Low

C. POLICE PROTECTION[1]

In Alberta the provincial government is responsible for police protection in rural areas and in urban areas under 1500 population. The Royal Canadian Mounted Police (RCMP) provides the policing in accordance with an agreement between the Governments of Alberta and Canada.

Urban areas over 1500 population have an option to organize their own police force or to utilize the RCMP. Excepting the major cities, most urban centres choose to have the RCMP provide the police protection service. The costs charged to the municipality and the policing arrangements are covered in the Appendix to the Federal-Provincial/Municipal police agreements.

The Appendix lists the 60 municipalities in Alberta which enter into policing agreements with the federal government. The list includes all of the eight urban municipalities in the comparison sample used in this report. The only rural municipality included on the list is the County of Strathcona due to a policing agreement it has in respect to Sherwood Park.

The policing arrangements in Strathcona County therefore consist of a provincial and a municipal component both of which utilize the RCMP. The county is responsible for the financing and contractual arrangements for the RCMP in Sherwood Park while the province undertakes a similar responsibility for the RCMP in the rural areas of the county. Both the urban and rural detachments of the RCMP are located in Sherwood Park. Each have quite distinct areas of responsibility within their respective boundaries.[1]

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[1] The data presented in Part II and in section A of Part III grouped all protective services under one category. In this and in following sections the various protective services are examined separately.

The RCMP provides police services in regard to criminal law enforcement and traffic law violations. The police force enters into agreements with municipalities in regard to the enforcement of municipal by-laws but that is not a priority responsibility. Many municipalities employ their own by-law enforcement officers for that purpose. (See section G, page 126.)

Financial Analysis

The analysis which follows examines the police service in Sherwood Park only since that component is the one in which municipal expenses are involved. Comparisons are restricted to the four cities in the comparison sample. The smaller-sized towns are subject to different financial arrangements with the RCMP and the sample rural municipalities encounter no cost for the RCMP service within their boundaries.

A new 10 year federal-provincial agreement establishing the costs of utilizing RCMP services came into effect on 1 April 1981. The new agreement resulted in a considerable increase in provincial and municipal costs. Section 12(1)(f) of the Appendix to the agreement is the one which pertains to Sherwood Park and to the four sample cities.

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[1] The Strathcona rural detachment does not cover the entire rural area of the county. Parts of the northern and eastern portions are covered by RCMP rural detachments in Fort Saskatchewan and Tofield.

The section states that urban municipalities over 15,000 population shall, for the period of 1 April 1981 to 31 December 1981, re-imburse the federal government for 81 per cent of the cost of municipal police services. The percentage of cost is to increase by one per cent each year for the following five years and by two per cent a year in subsequent years so that by 1988 a maximum of 90% is reached. The agreement is effective until 1991 and in all years overtime expenses are charged at 100% of cost.

The municipal-federal cost-sharing arrangement applies to RCMP manpower and directly-related costs. Other costs for which the municipalities are responsible include accommodation for the police headquarters, secretarial support staff and other civilian personnel.

The urban and rural detachments for Strathcona County operate under a single senior administration consisting of an inspector and three assistants. The salaries for three members of this administration staff are included in the provincial agreement with the RCMP for the rural areas of the county while the other member is included in the municipal agreement for Sherwood Park. This arrangement represents some saving on Sherwood Park costs in comparison with other urban centres, such as St. Albert and Red Deer, where the provincially-financed rural detachments are administered separately in another building or in another municipality.

Table 35 presents the basic expenditure and revenue data for the police protection service in Sherwood Park and in the four comparison cities. There are several matters which should be noted.

In respect to the gross expenditure, the per capita levels in 1981 for all the municipalities are quite similar. Sherwood Park's level is slightly below the 4C average but it is well within the range shown of $36 (St. Albert) to $50 (Fort McMurray).

The revenue from fines shows Sherwood Park receiving almost twice as much as the 4C average. The amount of revenue in any one municipality is dependant upon the number of violations and how rigorously any violations are prosecuted. Strathcona County, including especially Sherwood Park and the highly-developed country-residential areas east and south of the hamlet, are well-known in the Edmonton Metropolitan area as a location where traffic and liquor laws are strongly enforced. The RCMP maintain a very high profile on all heavily-travelled roads in the region. As well, due to the integration of the rural and urban detachments in Sherwood Park both the urban and rural area fines are returned to the county. The four cities tabulated in Table 35 receive only the fine revenue generated within the city boundaries.

The 'other operating revenues' column of Table 35 includes primarily the Law Enforcement Grant received by all urban municipalities over 1500 population. Those municipalities utilizing the RCMP receive an amount of $12 per capita. Other revenues include minor items such as rentals of building space and/or equipment. For example, Strathcona County collects rental revenue for the space occupied by the rural detachment at the Sherwood Park station. Grants received from the federal government by Red Deer in 1981 and Sherwood Park in 1982 have not been included because the grants are special ones not received each year.

TABLE 35

Police Protection Expenditure and Revenue, 1981
(and 1982 for Strathcona County) in dollars per capita
and Net Expenditure in dollars per $1000 EA

	dollars per capita				dollars per $1000 EA
	Gross Expenditure	Revenue from Fines	Other Operating Revenues	Net Expenditure	Net Expenditure
Fort McMurray	50	6	19	25	4.6
Grande Prairie	47	10	12	25	3.8
Red Deer	48	6	18*	24	4.1
St. Albert	36	6	13	17	3.2
4C average	45	7	15	23	4.0
Sherwood Park					
1981	42	13	15	14	2.4+
1982	57	14	13*	30	5.4+

* special federal grants not included.
+ if entire county assessment is used, figure is 0.8 in 1981 and 1.8 in 1982.

Note: see footnote page 62 for explanation of expenditure and revenue.

Source: Financial Statements. Population used is from Appendix Table II-1, p. A-7. Fine revenue data from Alberta Solicitor-General. Assessment data from Appendix Table II-2 page A-8. Sherwood Park estimated.

The per capita levels of 'other operating revenues' show little variation among the municipalities, with Sherwood Park at a level identical to the 4C average.

The subtraction of fines and other revenues from the gross expenditure produces the net expenditure levels shown in Table 35. For the 1981 year of comparison the most noticeable aspect is the lower level of per capita net expenditure for Sherwood Park, less than two-thirds the level of the 4C average. The lower level is also reflected in the net expenditure per $1000 EA. The reason pertains almost entirely to the higher level of fines revenue received by the county.

The final item to be noted from Table 35 is the large increase in gross and net expenditure levels in Sherwood Park from 1981 to 1982. This illustrates the effects of the new federal-provincial policing agreement since 1982 was the first full year in which it was operational. It is expected that the four cities would illustrate similar increases if 1982 data were available. At any rate, the 1982 levels for Sherwood Park are more indicative of the anticipated future level of service costs. In fact the costs should increase somewhat each year until the maximum municipal share of 90 per cent is reached in 1988.

Staffing and Expenditure Details

Table 36 provides some comparative data for the numbers of police officers and civilian support staff. The number of officers is virtually identical in all the municipalities shown except Red Deer. But in terms of the ratio of population per police officer there are

TABLE 36

Police Protection Staffing Data, 1981 and 1982

	Number of Police Officers	Number of Residents per Police Officer	Number of Civilian Support Staff	Police Officer per Support Staff
Fort McMurray				
1981	33	932	18	1.8
1982	34	988	18	1.9
Grande Prairie				
1981	31	780	13	2.4
1982	33	735	14	2.4
Red Deer				
1981	56	810	19	2.9
1982	61	796	21	2.9
St. Albert				
1981	31	1006	11	2.8
1982	33	999	11	3.0
4C Average				
1981	38	871	15	2.5
1982	40	866	16	2.5
Sherwood Park				
1981	31	929	19	1.6
1982	32	930	19	1.7

Source: Research and Planning Branch, Alberta Solicitor-General; Municipal Financial Statements; calculations by Urban Advisory Group (UAG) staff.

some notable differences. Grande Prairie has a considerably more favourable ratio than the other municipalities while St. Albert has the least favourable ratio. Sherwood Park is slightly less favourable than the 4C average but appears better off in comparison with St. Albert.

In terms of the extent of civilian support staff the most noticeable feature is the high level of such staff in Sherwood Park compared with the four cities, especially in relation to St. Albert.

The effects of the numbers of officers and support staff upon police protection expenditures are illustrated in Table 37. The communities with the most favourable ratios of population per police officer, Grande Prairie and Red Deer, also encounter the highest per capita costs for their RCMP contracts. For St. Albert and Sherwood Park, the population per officer ratio is less favourable but the per capita costs for contracted services are also lower.

The relatively high level of civilian support in Sherwood Park and in Fort McMurray results in expenditures per capita and percentages of total expenditure somewhat higher than the 4C average and considerably higher than St. Albert and Grande Prairie in particular.

The level of support staff and other related support costs are to some extent a matter of municipal discretion. Strathcona County, in relation to Sherwood Park, exercises this discretion to a relatively large degree and as a consequence non-contract costs are relatively high.[1] As will be discussed more fully later however, these non-contract expenditures appear to be worthwhile when crime statistics are considered.

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[1] The civilian support staff data is that attributable to the urban detachment only in Sherwood Park.

TABLE 37

Police Protection Expenditure Details, 1981 (and 1982 for Sherwood Park)

	RCMP Contract Costs		Civilian Support Salary Costs		Other Non-Contract Support Costs		Total Contract and Support Costs per capita
	per capita	% of total	per capita	% of total	per capita	% of total	
Fort McMurray	31.8	63.3%	16.2	32.3%	2.2	4.4%	50.2
Grande Prairie	37.5	79.1%	9.0	19.0%	0.9	1.9%	47.4
Red Deer	35.6	73.6%	10.0	20.7%	2.8	5.8%	48.4
St. Albert	28.1	76.2%	7.2	19.5%	1.6	4.3%	36.9
4C Average	33.3	72.5%	10.6	23.1%	2.0	4.4%	45.9
Sherwood Park							
1981	28.1	64.5%	11.1	25.5%	4.4	10.1%	43.6
1982	40.2	70.0%	14.7	25.6%	2.5	4.4%	57.4

Note: Total per capita costs may be slightly higher than those indicated as 'gross expenditure' in Table 35 because the minor amounts of internal transfers expenditure are not discounted here.

Source: same as Table 36.

Public Opinion

The 1979 Burton survey data included a question on the rating of police protection services. (See Appendix Table III-3 page A-53 and Appendix Table III-6 page A-60.) Overall, the service was rated quite highly with 73.8 per cent rating it as 'good' compared to only 2.9 per cent rating it as 'bad.'

The most favourable ratings were from the Urban (Sherwood Park) residents with 80.7 per cent classifying police protection as 'good.' The Estate (country-residential) residents were noticeably less impressed with a 60 per cent 'good' rating.

In terms of the ratings by electoral division, the least favourable ratings came from residents of ED 1 (now annexed by Edmonton and Leduc County) and from ED 3 (in the south-east corner around Cooking Lake). Both of these rural divisions gave less than a 55 per cent 'good' rating. The highest ratings, all in excess of 80 per cent 'good,' came from the four Sherwood Park electoral divisions.

It should be kept in mind that the police protection service analysed in this report pertains only to the urban detachment for Sherwood Park. The rural parts of the county, while administered from the same police headquarters, are serviced by a rural detachment which is a provincial-federal, rather than municipal-federal, responsibility. Consequently, the high satisfaction ratings given by the Sherwood Park residents are of the greatest significance here.

Service Efficiency and Effectiveness Comparisons

The financial analysis data for the police protection service has indicated (for 1981) that Sherwood Park had gross expenditures which were about average, but it collected almost twice the average revenue from fines resulting in a net expenditure noticeably lower than the four cities analysed. As well, it has been shown that Sherwood Park employs a higher than average number of support staff and that the overall service is rated very highly by Sherwood Park residents.

Further comparative data on the police service is provided by the crime statistics compiled in Table 38. In all categories shown, Sherwood Park has the lowest rates of crime per 1000 population and one of the highest percentages of crime clearance.

The crime rate comparisons should be qualified in recognition that Sherwood Park is a relatively well-to-do 'bedroom' suburban community. That makes it considerably different from Grande Prairie and Fort McMurray which are regional centres in their own right and staging centres for large-scale northern construction and development. But Sherwood Park is of similar structure as St. Albert, and although the crime rates in St. Albert are generally lower than the other cities they are significantly higher than Sherwood Park.

Sherwood Park does not have a low number of residents per police officer (930) especially in comparison with Grande Prairie (780). But Grande Prairie has a much higher rate of crime.[1] The low crime rate in Sherwood Park enables the available officers to attend to other duties, such as traffic and highway offenses which are rigorously enforced. As well, the high-profile of the RCMP in Sherwood Park and in rural Strathcona County likely acts as a major deterrent to criminal activity. The police there have been able to devote time to community priorities and to undertake a comparatively 'community-orientated' posture. The low crime rate enables such police activities and those activities contribute towards maintaining the low crime rate.

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[1] 1981 was the height of the 'boom' in Grande Prairie, hence the very high crime rates even in comparison with Fort McMurray could be considered abnormal.

Another important factor to be considered is the high level of civilian support staff employed in the Sherwood Park detachment. The ratio of police officers to support staff in Sherwood Park (1.6) is nearly twice as favourable as that in St. Albert (2.8). This raises the question of whether all the civilian support in Sherwood Park is really necessary given its low crime rate, or whether the low crime rate is at least partially due to the high level of support staff enabling police officers to attend to other duties. The lower crime rates in Sherwood Park than St. Albert, particularly in the non-violent crime categories, would tend to indicate that the extra money involved for civilian support is well spent.

Table 38 also includes figures for percentage of crimes cleared. Sherwood Park has a noticeably higher percentage in all crime categories and in total than the other cities with the notable exception of Fort McMurray. And it may be no coincidence in that regard that Fort McMurray has a civilian support staff level which is nearly as high as that in Sherwood Park.

Despite the high civilian complement involved, net per capita expenditures for police services in Sherwood Park are relatively low

TABLE 38

Comparisons of Criminal Code Crime Data 1981

	Violent Crime[1]			Property Crime[2]			Other Crime[3]			Total Crime		
	Number of Offences (% of total)	Rate per 1000 pop.	Per Cent Cleared	Number of Offences (% of total)	Rate per 1000 pop.	Per Cent Cleared	Number of Offences (% of total)	Rate per 1000 pop.	Per Cent Cleared	Number of Offences	Rate per 1000 pop.	Per Cent Cleared
Fort McMurray	319 (9.7)	10.4	85.6%	2011 (61.1)	65.4	36.2%	958 (29.2)	31.1	50.8%	3288	106.9	45.3%
Grande Prairie	302 (7.5)	12.5	80.5%	2658 (65.8)	110.0	28.0%	1078 (26.7)	44.6	35.7%	4038	167.1	34.6%
Red Deer	358 (6.8)	7.9	76.0%	3494 (66.6)	77.0	34.7%	1393 (26.6)	30.7	30.0%	5245	115.5	36.2%
St. Albert	140 (5.8)	4.5	77.1%	1278 (53.3)	41.0	29.0%	981 (40.9)	31.5	43.3%	2399	76.9	37.7%
4C Average	277 (7.5)	8.8	79.8%	2360 (61.7)	73.4	32.0%	1103 (30.9)	34.5	40.0%	3743	116.7	38.5%
Sherwood Park	99 (6.7)	3.4	84.8%	882 (58.6)	30.6	43.0%	525 (34.7)	18.2	40.7%	1506	52.3	45.0%

1 includes homicide, sexual offences, assualt.
2 includes thefts, break and enter, fraud.
3 includes prostitution, offensive weapons, disturbing peace.

Note: Traffic and Highway offences not included.

Source: same as Table 36.

in the 1981 comparison. In addition, the net costs of the service are met through general taxation throughout the entire county. Consequently, Sherwood Park residents are receiving an efficient and effective police service at considerably lower cost than residents of other urban centres. The general comparisons with the 4C averages are shown in Table 39.

There is no data presented to enable a comparison of police services in rural Strathcona County with the five sample rural municipalities. Other rural municipalities encounter no expense for RCMP services since it is a provincial-federal responsibility.[1]

Given that rural RCMP services are more or less standard throughout Alberta, it is logical to assume that the service in Strathcona County is at least average. The 1979 Burton survey showed fairly high levels of satisfaction with police services by rural residents although the levels were not, especially from country-residential residents, as high as those expressed by Sherwood Park residents. The rural residents of Strathcona County, however, pay for part of the costs of the Sherwood Park police service through their property taxes. Other rural municipal residents, excepting those in Parkland County, do not pay for police protection; consequently, the cost of the service in rural Strathcona must be considered above average.

Table 40 summarizes the service ratings. In general, the police protection service is highly rated particularly for Sherwood Park.

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[1] Costs for police protection in rural municipalities are normally associated with special municipal by-law enforcement. The County of Parkland is an exception because it has its own force of special constables in addition to the normal rural RCMP service. Net expenditures for Parkland in 1981 were $352,770 ($14 per capita).

TABLE 39

Police Protection Service Comparisons, 4C Average and Sherwood Park 1981

	4C Average	Sherwood Park
Expenditure ($'s)		
- RCMP Contract per capita	33	28
- Support Costs per capita	13	16
- Total per capita	46	44
Revenues ($'s)		
- Fines per capita	7	13
- Other Revenue per capita	15	15
Net Expenditure ($'s)		
- per capita	24*	16*
- per $1000 EA	4.0	2.4+
Staffing		
- Population per Policeman	871	929
- Policemen per Support Staff	2.5	1.6
Crimes		
- per 1000 population	116.7	52.3
- clearance rate	38.5%	45.0%

* includes internal transfers. If discounted 4C Average is $23 and Sherwood Park is $14. See Table 35.

+ figure is 0.8 if assessment of entire county is considered.

Source: see Tables 35, 36, 37 and 38.

TABLE 40

Police Protection Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	High	Average	Above Average
Cost	Very Low	High*	Below Average
Satisfaction	High	Average	Above Average
Efficiency	Very High	Low*	Above Average
Effectiveness	Very High	Average	High

Note: Possible ratings are:
- Very high
- High
- Above average
- Average
- Below average
- Low
- Very Low

* High cost and Low efficiency ratings based not on service evaluation but on fact that rural residents pay for costs of the service generated by Sherwood Park.

The high cost and low efficiency rating in the rural areas arise from the fact that local police protection costs are due to the service provided in Sherwood Park yet all residents of the county share these costs equally through general municipal taxation. In this regard, there is a notable benefit/cost imbalance in the county.

Before concluding this section on police protection, it should be emphasized that most of the comparative data pertains to 1981. Costs in 1982 increase substantially (see Table 35) and they are likely to continue increasing due to the financial arrangements of the new Federal-Provincial Agreement. As well, every indication from the federal government and the RCMP is that any expansion in the near future of existing RCMP municipal services is very unlikely.

Sherwood Park, like other Alberta urban centres, has the option of terminating RCMP services and setting up its own municipal police force. The current level of costs and the high efficiency and effectiveness of the present RCMP does not indicate any immediate requirement to undertake changes. But it would be prudent for Strathcona County to at least study the 'own police force' option for the future, particularly if significant new population growth is expected. The potential options to sole reliance upon the RCMP include a municipal police force for Sherwood Park or a municipal police force for the entire county.

D. FIRE PROTECTION

Strathcona County has operated its own fire department since 1956 with the establishment of a fire station in Sherwood Park. To date it remains the only rural municipality in Alberta to own and operate a fire protection service without a major reliance on other municipalities.

Fire protection services are provided to all areas of the county. The fire department presently operates from four fire stations: the main station in Sherwood Park (present station established 1975), South Cooking Lake (established 1967), Ardrossan (established 1973) and Josephburg (established 1981). Each station provides first response to calls originating within designated fire districts. The Sherwood Park station, for example, provides coverage to the hamlet, to the industrial area near the boundary with Edmonton and to the county rural area extending some 16 km north and south and six km to the east.

A mutual aid agreement for back-up service exists with the City of Edmonton. The agreement is based on a fee of $500 per hour per unit, but its use to date has been rare. Strathcona County is presently negotiating similar agreements with the Town of Bruderheim and the County of Beaver in respect to the eastern areas of Strathcona, as well as an industrial area agreement with the Town of Fort Saskatchewan.

The fire department manpower contingent consists of 30 regular full-time members, including 24 1st Class firefighters, and 73 volunteers. The Sherwood Park station is operated on a 24-hour basis by six full-time members. Back up support is provided by platoons on call with each platoon consisting of one-half full-time staff and one-half volunteers. Seventeen volunteers are assigned for back-up purposes to the Sherwood Park station.

The three rural-based stations (Ardrossan, Josephburg and South Cooking Lake) operate entirely with volunteers, and each station is under the direction of a district fire chief. These stations are manned only when there is a fire call or for maintenance purposes.

The operation and organization of the Strathcona fire department is designed to provide coverage to all components of the county. All fire calls are received at and dispatched from the main station in Sherwood Park to the appropriate fire district station. A fire alarm system links the central station with major commercial and institutional buildings in the county. This communication network has been highly rated by the Provincial Fire Prevention Branch.

Required coverage for the country-residential development in the county has significantly influenced the department operation. One of the two large water tankers stationed at Sherwood Park is required to service the country-residential areas of the rural fire district around the hamlet. The fire stations at Ardrossan and South Cooking Lake were established as a result of country-residential growth in those areas of the county.

The industrial area of the county does not create such a major operational burden on the fire department. Industrial fire protection standards are well-established and adhered to by industries for insurance coverage purposes. The larger industrial operations have their own water supply and fire protection services.

Nevertheless, the Sherwood Park station acts as a first back-up service to major industries and as a first response service to the smaller industries that lack their own systems. The articulated aerial platform recently acquired is intended, in part, to service the industrial areas. The mutual aid agreement with Edmonton is intended for additional back-up response for industrial area fires.

Responses to fire calls over the past several years shows the following pattern:

Sherwood Park	29%
Rural Areas	69%
Industrial Areas	2%

The disproportionately large fire incidence, in terms of population distribution, in the rural area is caused by grass, bush and rubbish fires which account for one-third of all fires in the county. Eighty-four per cent of those types of fires have occurred in the rural parts of Strathcona County over the 1976-1980 period. As well, the number of fires involving buildings and vehicles in the rural portion of the county has been two to three times as high as that for Sherwood Park.

The Strathcona fire department also operates the county ambulance service although budgeting and financing are recorded separately. An advantage of this arrangement is that it allows operational savings through the sharing of housing, communications and manpower at the Sherwood Park fire station. Disadvantages are that the firefighting capability may be reduced by ambulance calls and that reserve manpower requirements and costs are increased by the need to maintain adequate coverage for the ambulance service. These extra costs, however, are allocated to the ambulance service. (See Section F, page 112.)

The fire department is involved in other activities apart from response to emergency calls. A comprehensive fire training program is conducted under a division chief of training for all full-time and volunteer staff. Although there are no federal or provincial fire training or certification programs to which municipalities must adhere, Strathcona County along with several of the larger urban municipalities patterns its firefighting standards on guidelines established by the National Fire Protection Association (NFPA). These standards are also followed at the provincial firefighting school in Vermilion. Strathcona County, along with Fort McMurray and Red Deer, have made extensive use of the school for staff training.

Other major services provided by the fire department are fire investigation and fire prevention, including fire hazard inspection and public education. Courses and seminars are offered in cardio-pulmonary resuscitation, first aid and safety procedures.

Financial Analysis

Table 41 provides the pertinent expenditure and revenue data in per capita terms for Strathcona County and the comparison municipalities. Notice that the MDs of Foothills and Rockyview are not included for the reasons mentioned at the bottom of the table.

In regard to the levels of total expenditure, Strathcona County is noticeably higher than the towns and rural municipalities in per capita expenditures but noticeably lower than the four cities in per

TABLE 41

Fire Protection Service Operating Expenditures and Revenues, 1981
(and 1982 for Strathcona)

	dollars per capita					dollars per $1000 EA
	Gross Expenditure for Staff	Other Expenditure	TOTAL GROSS EXPENDITURE	Operating Revenues	TOTAL NET EXPENDITURE	TOTAL NET EXPENDITURE
Town of Airdrie	9.6	5.5	15.1	nil	15.1	3.5
Town of Ft. Sask.	3.3	9.6	12.8	nil	12.8	0.9
Town of Leduc	2.4	4.4	6.8	0.2	6.6	1.2
Town of Spruce Grove	7.3	3.9	11.2	0.8	10.4	2.0
City of Ft. McMurray[1]	54.2	7.2	61.4	0.3	61.1	11.4
City of Grande Prairie	32.3	6.7	39.0	2.8	36.2	5.5
City of Red Deer[2]	48.9	3.0	51.9	0.4	51.5	9.0
City of St. Albert	31.0	1.8	32.8	4.8	28.0	5.0
4 City Average	42.9	4.4	47.3	1.9	45.4	7.9
County of Leduc	0.8	4.3	5.1	0.1	5.0	0.5
County of Parkland	1.0	5.9	6.9	0.6	6.3	0.5
MD of Sturgeon	3.1	14.2	17.3	nil	17.3	1.9
3 RM Average	1.6	8.2	9.8	0.3	9.5	0.9
Strathcona County 1981	20.1	4.0	24.1	0.3	23.8	2.4
1982	23.1	3.6	26.7	0.3	26.4	2.6

Note: see footnote page 62 for explanation of revenue and expenditure data. Provincial interest stabilization grants excluded from revenue.
MDs of Foothills and Rockyview excluded. Expenditures involve transfers to own municipal agencies (fire district associations) and breakdown of operation and capital costs not presently available.

[1] To 1983 fire and ambulance service data has been reported combined. Above data for Fort McMurray are estimates based on the ratio of projected revenues to expenditures for both fire and ambulance from 1983 budget.

[2] Red Deer, as is the case with Strathcona County, operates ambulance service as part of fire service allocating common costs according to its discretion. If manpower costs were allocated on the same basis as Strathcona, gross expenditure would be $46.00 per capita and net expenditure would be $45.50.

Source: Financial Statements.

capita and per $1000 EA expenditures.

Revenues are not of much consequence except for Grande Prairie and St. Albert both of which receive significant money for fire protection services to surrounding municipalities. Strathcona's revenue is primarily due to $500 per hour per unit received from the provincial government for emergency responses on primary highways.

The proportion of gross expenditure represented by staff salaries, wages and benefits is similar in Strathcona (about 85 per cent) as in the four cities (average of 90 per cent), but the per capita level of staff costs in Strathcona is about one-half that of the cities.

Actually, the fire protection service in Strathcona is not really comparable with other municipalities. Other rural municipalities do not operate a full-service fire department and what costs they do incur are for small volunteer forces or for contractual arrangements with other municipalities. The smaller urban centres often have their own fire departments but they are usually staffed by volunteers (which keeps manpower costs low) and they rely upon back-up contractual arrangements with other near-by municipalities. In fact, it is not uncommon for two or more municipalities to jointly own and operate a single fire department. The larger urban centres normally operate their own fire department and rely almost exclusively on full-time staffing.

Strathcona County, on the other hand, utilizes a combination of full-time and volunteer staff with the volunteers assigned duties in the rural areas of the county or as a back-up for the Sherwood Park station. The volunteer members represent about 70 per cent of the department's staff but volunteer manpower costs account for less than 10 per cent of the total manpower costs.[1]

A more realistic comparison with the sample cities is derived if 90 per cent of the county fire department's manpower costs are divided by the population of Sherwood Park only. That produces a figure of $31 per capita which is very similar to St. Albert and Grande Prairie.

The 'other expenditure' column from Table 41 includes materials, supplies, utilities, contracted services and general services such as vehicle maintenance. The per capita level of such costs is generally higher in the towns and rural municipalities than in the cities and Strathcona. This is due primarily to contractual arrangements with other municipalities for joint or back-up services.

Strathcona County, like the four cities, tends to rely almost exclusively on its own fire department and does not encounter major costs for joint-service contracts. The per capita level in the county for 'other expenditures' is comparable to the 4C average. The decline in the county expenditure from 1981 to 1982 is due to a reduction in the training schedule and payment to volunteers and a transfer of maintenance costs to the vehicle and equipment services department of the county's engineering division.[2]

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[1] Volunteers are currently paid $10 per hour on fire calls. In 1981 they were also paid $10 per hour for training sessions but that was reduced in 1982 to $5 per hour. As a result volunteer costs as a percentage of total manpower costs declined from 9.3 per cent in 1981 to 6.5 per cent in 1982.

[2] Had these maintenance costs been transferred in 1981, the per capita expenditure would have been $3.30 rather than the $4.00 shown in Table 41.

Public Opinion

The 1979 Burton studies showed a fairly high level of satisfaction with the county's fire protection service. (See Appendix Tables III-3 page A-53 and III-6 page A-60.) Overall the service was rated as 'good' by 72.5 per cent of respondents, as 'average' by 15.2 per cent and as 'bad' by only 5.8 per cent. There were noticeable differences, however, in the satisfaction levels expressed by different types of residents.

The urban Sherwood Park residents were very well satisfied with an 84 per cent 'good' rating. Traditional rural residents were somewhat less impressed with a 71 per cent 'good' rating while the country-residential residents gave only a 50 per cent 'good' rating and expressed a 15 per cent 'bad' rating, nearly three times the average for the county as a whole.

The responses by electoral division showed the three divisions furthest away from Sherwood Park (EDs 1, 3 and 5) all with 'good' ratings from less than 50 per cent of the respondents. ED 5 (northern part of the county) had the lowest 'good' rating at 35 per cent, but it should be noted that the Josephburg station which now services ED 5 was not built at the time the survey was undertaken. Remember also that ED 1 was almost entirely lost to the county through the 1 January 1982 annexation.

Service Efficiency and Effectiveness Comparisons

The Strathcona County fire department is the first-call service for virtually the entire county with the main station in Sherwood Park being supplemented by three rural-based district stations.

There are a large number of variables which can be used to indicate the level of service including number of calls, property and life loss due to fire, average response times, level of manpower training and equipment available. Overall the levels for Sherwood Park are quite similar to those of urban municipalities of a similar size and the training level for firefighters is probably above average.[1]

The level of service in the rural parts of the county is generally better than that in other rural municipalities in the metropolitan regions. Most rural areas rely upon fire protection services from a number of small or large urban centres in the vicinity. In Strathcona the service for the entire county is co-ordinated through one department with the district stations providing first-response in their designated areas and back-up response for other districts if required. This co-ordinated coverage along with the central communication system provides a fire protection service with which few other rural areas can compare. The response time in the rural areas is, of course, greater than that in Sherwood Park (6.5 to 8 minutes rural, 2.4 minutes Sherwood Park) but it is, at the very least, comparable to the response time in the comparison rural municipalities.

The financial aspects of the service are summarized in Table 42. The expenditure level for the county is higher than the 3RM average

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[1] Derived from data available from Provincial Fire Marshall's Office.

TABLE 42

Fire Protection Service Comparisons, 4C average, 3RM average and Strathcona County 1981

	4C Average	3 RM* Average	Strathcona County
Staff Salary, Wages			
- $'s per capita	42.9	1.6	20.1+
- per cent of gross exp.	90.7%	16.3%	83.4%
Total Gross Expenditure			
- $'s per capita	47.3	9.8	24.1
Total Net Expenditure			
- $'s per capita	45.4	9.5	23.8
- $'s per $1000 EA	7.9	0.9	2.4

* Two rural municipalities excluded. See Table 41.

+ if full-time salary costs are divided by Sherwood Park population only the figure is approximately $31 per capita.

Source: see Table 41.

but considerably less than the 4C. Most of the costs of the service are attributable to the Sherwood Park station. But if only Sherwood Park's population is used to derive per capita figures, the expenditure levels would be almost the same as St. Albert and still somewhat less than the 4C average.

The Strathcona County service obtains some cost savings due to the use of volunteers at the rural stations and as back-up at the Sherwood Park station. This is especially true in rural areas which accounted for 69 per cent of all calls (1976-80) but volunteer costs accounted for less than 10 per cent of total manpower costs.

The fiscal effort required for the service (in terms of dollars per $1000 EA) in the county is about one-third that of the cities average but almost three times that of the rurals. The ability of Strathcona to spread the net cost of the service over the entire assessment base of the county results in a well-below average tax burden for Sherwood Park residents but a well-above average burden for rural residents.

The satisfaction levels from the Burton studies show that the highest ratings came from Sherwood Park residents while the lowest came from the rural sections furthest away from the main station in the hamlet. Country-residential residents were the least satisfied group but one suspects that their rating of the service is based upon prior experience in urban centres and not in rural areas. The low rating from ED 5 occurred prior to (and may have prompted) the establishment of a district station in Josephburg.

The service evaluation is tabulated in Table 43. Overall

TABLE 43

Fire Protection Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	Average	High	Above Average
Cost	Low	High	Below Average
Satisfaction	High	Average	Above Average
Efficiency	High	Average	Above Average
Effectiveness	High	Average	Above Average

Note: Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

the service is rated as above average due to the comparatively high level in rural areas, the central communication feature and the extensive undertaking of NFPA approved training. There is a disparity between the rural and Sherwood Park components in terms of service cost but the high rural cost (in comparison with other rural municipalities) is at least partially offset by the benefit of a comparatively high level of service.

The effectiveness rating for the rural component may show an improvement with the recent fire protection upgrading undertaken for the north and north-central parts of the county. As well, if negotiations are successful with the Towns of Tofield and Bruderheim the eastern edges of the county could anticipate service improvements.

With the acquisition of the articulated aerial platform, and of the pumper/tanker unit for Josephburg in 1982, the fire protection service is considered adequate for present and anticipated requirements for a number of years. Service expansions in Ardrossan and Josephburg and the construction of a second station in Sherwood Park would be required if anticipated new development and population growth materializes. These service level improvements would likely create service cost increases especially if the numbers of full-time staff were increased.

E. DISASTER SERVICES AND EMERGENCY MEASURES

A program of preparation for and response to emergency and disaster situations at the municipal level is administered in the following manner:

A municipal disaster services agency is established in a municipality by a by-law according to the provisions of s. 8, Disaster Services Act, RSA 1980, chapter D-36. The municipality appoints a director of this agency, quite frequently the fire chief. This agency cooperates closely with the existing fire, police and ambulance services in a municipality. In Strathcona, the disaster services are presently* under the direction of the Chief Commissioner and are operated by the fire department.

The municipal disaster services agency, in close cooperation with provincial authorities, prepares a detailed fire hazard analysis and disaster and emergency response plan. The County of Strathcona is presently* updating their plan.

After the plan has been approved by the Alberta Disaster Services Authority and then adopted by a municipality, the municipality is eligible for a provincial conditional grant. The annual grant is based on an amount per capita. In 1981 it was $0.17 and in 1983 it was $0.175, with the exception of Edmonton and Calgary where the grant was a fixed amount of $50,000.

There is also a grant available to municipalities for the purchase of equipment, such as radios and rescue kits, up to a maximum of $2500 a year. There are a number of aspects the province looks at in establishing the need of the municipality for the equipment grant, such as:

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* March 1983.

Remote location of a municipality
Relative potential for disasters
Previous provincial grants received

Annually, the province also distributes a limited number (22 in 1982) of pre-assembled rescue kits to some municipalities. The value of these kits is estimated at $2700. Any municipality can apply as long as it complies with the condition of having at least 10 trained rescue people available. Strathcona has rescue kits located at fire stations in Sherwood Park and Ardrossan.

The province also assists municipalities in covering the costs of training personnel. Various pamphlets and brochures for public distribution are provided without charge.

When excessive damages occur as a result of emergencies or disasters, such as floods or large fires, the Alberta Disaster Committee evaluates the situation and recommends and administers the assistance payments to municipalities or the affected organization.

Financial Analysis

Table 44 shows the dollar amounts involved in expenditures and grants for disaster services. Note that unless there are exceptional circumstances, as in the cases of Red Deer and the Town and County of Leduc, net municipal expenditures are normally nil.

TABLE 44

Disaster Services and Emergency Measures, Expenditures, Provincial Grants and Net Expenditure 1981 in dollars

		Expenditure	Provincial Grant	Net Expenditure
Airdrie		6,049	885	5,164
Fort Saskatchewan		1,722	1,722	nil
Leduc		20,683*	1,740	18,943*
Spruce Grove		nil	nil	nil
Fort McMurray		nil	nil	nil
Grande Prairie		2,500	3,408	(908)ø
Red Deer		133,821+	129,981+	3,840
St. Albert		4,427	4,427	nil
County of Leduc		31,464*	1,642	29,822*
County of Parkland		3,555	3,555	nil
MD of Foothills		1,360	1,360	nil
MD of Rockyview		nil	nil	nil
MD of Sturgeon		3,582	3,582	nil
Strathcona County	1981	1,297	6,909	(5,612)ø
	1982	2,828	7,917	(5,089)ø

* The Town and County of Leduc jointly purchased a rescue vehicle. The county's expenditure also includes grants to individuals and organizations to cover flooding damage.

+ Amounts include grants to individuals and organizations for damages caused by a rainstorm.

ø According to Alberta Disaster Services, the minimum municipal expenditure must equal the provincial grant. Expenses, however, may be included in municipal financial statements under general administration, fire protection or other expenditure categories.

Source: Financial Statements.

The net gain on the service reported by Grande Prairie and Strathcona County is due to accounting procedures which include disaster service expenses as part of other expenditure categories. In Strathcona's case the expenses are absorbed in the general administration function since the Chief Commissioner is the director of the disaster services agency.

Service Efficiency and Comparisons Evaluations

The hazard analysis and emergency response plans, including evacuation plans, are prepared by Strathcona's disaster services agency for the entire municipality. The benefits of the service therefore are considered equal in all parts of the county. The municipal costs, if any, are negligible in normal circumstances.

The main financing and approval for municipal disaster service agencies is a provincial responsibility, therefore it is expected that those municipalities which have organized such agencies have a similar type of service. The industrial area of Strathcona County may require some special attention, especially in terms of disaster hazards. But that would also be the case in other industrialized areas. Consequently, it can be assumed that average levels of service efficiency and effectiveness exist in Strathcona for both the urban and rural components of the county.

F. AMBULANCE

Strathcona County has been operating an ambulance service since November 1972. Prior to that date ambulance service was provided in the county by a private operator located in Edmonton.

Since its inception, the county ambulance service has been integrated with the fire department but with a separate budget and appropriation. The ambulance service operates from the main fire station in Sherwood Park and utilizes the station's facilities and communication system. It is staffed by the fire station's on-duty complement of six full-time 1st class firefighters. If responses to ambulance calls reduce the firefighting platoon to three or less, the fire-fighting back-up system provides immediate replacements. (See page 95.)

The ambulance service responds to all calls within the county. It also responds to RCMP calls for coverage of Highway 21 south to New Sarepta and Highway 16 east through Elk Island National Park. Highway 14 in the Hastings Lake area is covered for first response by the ambulance service in Tofield.

The county has mutual back-up agreements with surrounding municipalities including a 1982 agreement with the City of Edmonton which involves a $300 charge to the municipality requesting the service. The county responded to two calls from the city in 1982 but overall calls outside the county boundaries account for less than five per cent of the total.

In regard to calls originating from within the county, the data indicate that the demand placed on the ambulance service by the urban and rural components of the county is roughly in proportion to the urban and rural population distribution. Over the 1976 to 1982 period Sherwood Park, with about 60 per cent of the county population, accounted for 64 per cent of the calls.

The rural area calls (36 per cent of total) includes calls to the industrial area which over the 1976 to 1982 period accounted for about six per cent of total calls. The major industries are required by law to maintain ambulance services on site but the county service is often utilized due to its proximity (response time of five minutes or less) and cost savings to industry in terms of manpower not being used on ambulance calls.

Training and Equipment Standards

Before examining the Strathcona service further some explanation is required about the basis upon which standards are measured.

Training beyond the basic first aid level for ambulance attendants in Alberta involves two levels of certification:

- Emergency Medical Technician - Attendant (EMT-A).
    - Instruction is offered through a correspondence program from SAIT involving about 250 hours of instruction.
- Emergency Medical Technician - Paramedic (EMT-P).
    - A 2000 hour program involving full-time attendance at NAIT or SAIT.

The Alberta Ambulance Operators Association (AAOA) recognizes three levels of ambulance service standards:

- Emergency Response Unit (ERU)
    - the minimum level accepted by the AAOA. Refers to a service which has no personnel with training beyond first-aid. Has a basic complement of medical equipment.

- Basic Life Support Unit (BLSU)
  - a service which has a sufficient number of trained personnel from a recognized EMT-A course to provide full-time coverage. Has an advanced complement of medical equipment.
- Advanced Life Support Unit (ALSU)
  - a service which has a sufficient number of trained personnel from a recognized EMT-P course to provide full-time coverage.
  - also involves radio link to an active-treatment hospital, a heart monitor-defibrillator and a full complement of drugs, in addition to the advanced complement of medical equipment.

The county ambulance service operates four vehicles from the Sherwood Park station - two modular units and two standard vans. All are equipped to BLSU standards but the level of service is only ERU due to only two staff members having EMT-A accreditation - an inadequate number for full-time coverage. Eight staff members are generally required to provide full-time coverage at a designated service level for one ambulance unit.

In 1982 the county had 24 firefighters taking part in the EMT-A program but only two completed the course. It is estimated that the cost of upgrading the county service to a recognized BLSU level would be some $2000 - the tuition costs for certification of the firefighters.

Financial Analysis

Ambulance service revenue and expenditure data is presented in Table 45. Notice that only five of the 14 municipalities shown operate their own ambulance services.

TABLE 45

Ambulance Service Revenue and Expenditure Data 1981 (and 1982 for Strathcona)

	dollars per capita			dollars per $1000 EA
	Gross Operating Expenditure	Operating Revenue	Net Expenditure	Net Expenditure
Town of Airdrie*	17.5	5.6	11.9	2.8
Town of Ft. Sask.	2.9	nil	2.9	0.2
Town of Leduc	1.2	nil	1.2	0.2
Town of Spruce Grove	4.0	nil	4.0	0.8
City of Ft. McMurray[1]*	10.8	2.6	8.2	1.5
City of Grande Prairie	9.0	nil	9.0	1.4
City of Red Deer*	4.0	4.2	(0.2)	nil
City of St. Albert*	10.5	2.0	8.5	1.5
4 City Average	8.0	2.5	5.5	1.0
County of Leduc	1.2	nil	1.2	0.2
County of Parkland	1.1	nil	1.1	0.09
MD of Foothills	5.1	nil	5.1	0.5
MD of Rockyview	0.2	nil	0.2	0.02
MD of Sturgeon	nil	nil	nil	nil
5 RM Average	1.2	nil	1.2	0.1
Strathcona County 1981*	6.6 (11.4)	2.2 (3.8)	4.4 (7.6)	0.4 (1.4)
1982*	7.6 (12.2)	2.7 (4.2)	4.9 (8.0)	0.5 (1.4)

*: ambulance service operated by municipality (numbers in brackets show per capita for Sherwood Park only).

Note: see footnote page 62 for explanation of revenue and expenditure data.

[1] To 1983 ambulance and fire data has been reported on a combined basis. Figures are estimates based on ratio of projected revenues to expenditures for ambulance for the 1983 budget.

Source: Financial Statements.

Three of the towns, the City of Grande Prairie and all the rural municipalities (except Strathcona County) rely upon services provided by other municipalities, by private operators or by other agencies. None of those municipalities collect any revenue from ambulance operations and their expenditures, with the exception of Grande Prairie, are much lower than municipalities with their own service.

The different types of ambulance systems will be examined later in this section. For now, the attention is turned to the levels of expenditure and revenue of Strathcona County in relation to the other municipalities which operate ambulance services.

With the exception of Red Deer, the per capita gross expenditures of the county are lower than the other centres. But if only Sherwood Park's population were used, the figures would be very similar.[1]

The major expenditure component in the municipalities is staff salaries and benefits which account for an average of about 90 per cent of the gross expenditure. Strathcona allocates the cost of eight of the 24 person firefighting complement at Sherwood Park to the ambulance service.

The operating revenue derived is almost exclusively from user service charges. Most ambulance services in Alberta have adopted the fee guidelines set out by the AAOA as follows:

ERU service	-	$72	plus $1.38 per travel km.
BLSU service	-	$90	plus "
ALSU service	-	$117	plus "

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[1] Red Deer's system, like Strathcona's, is operated in conjunction with its fire department. Expenditure allocations to the ambulance service appear unrealistically low.

The per capita revenue generated by Strathcona's service is similar to Fort McMurray and St. Albert although if only Sherwood Park is considered it is somewhat higher. Red Deer's revenue is about twice that level due primarily to the large volume of long-range transfers of patients to and from Calgary and Edmonton. The high figures for Airdrie are due to the regional nature of its services, the revenue received from other municipalities it covers and the relatively high response numbers attributable to the heavily-travelled stretch of Highway 2 which intersects the town.

On the basis of the above user fee schedule and the number of calls per year (about 1100 in the 1980's), Strathcona could realize an additional $20,000 ($0.40 per capita) if its system were upgraded to BLS. That would more than offset the $2,000 tuition fees required to have sufficient ambulance personnel accredited as EMT-A.

The per capita net expenditure figures show Strathcona County at a level some 35 to 40 per cent less than the other centres operating ambulance services, again with the Red Deer exception. Note also that the level for the county is less than Grande Prairie and the MD of Foothills both of which do not operate an ambulance service. The level remains less than Grande Prairie, Fort McMurray and St. Albert even if only Sherwood Park is considered.

The net expenditure in terms of dollars per $1000 EA shows the county's level to be relatively low in relation to Airdrie, Fort McMurray, Grande Prairie and St. Albert. The level is also not much higher than most of the other municipalities; in fact is is less than that of Spruce Grove and the MD of Foothills.

There is no great difference in the county's figures from 1981 to 1982. No major changes have been made in the service and the net expenditure increased by less than eight per cent.

Public Opinion

The 1979 Burton survey did not specifically address the question of ambulance services but the 1976 study on Sherwood Park by Gary Gahr did.[1]

The satisfaction with the ambulance service at that time was quite high. Seventy-six per cent of the Sherwood Park respondents rated the service as being 'very adequate' while only 7.5 per cent rated it at the other end of the scale, that is, as 'not adequate.'

Service Efficiency and Effectiveness Comparisons

There is a wide variety in the types and levels of ambulance services provided in Alberta. Unlike some other provinces (British Columbia for example) there is little provincial involvement or co-ordination of vehicular ambulance services. There are also no legislated standards for ambulance services although the AAOA does provide guidelines and ratings.

There are exceptions to the rule but, in general, urban centres in Alberta with a population in excess of 1500 have some sort of ambulance service based in the municipality. Those that do not are almost always within a short distance of those that do. Smaller urban centres and most rural areas rely upon one or more urban-based ambulance services in the vicinity. Most ambulance services cover more than the municipality in which they are based through regional agreements.

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[1] See page 1 of this report for the reference.

There are three main types of ambulance services: municipally-operated often in conjunction with the fire department, privately-operated and hospital-operated. All normally encounter annual deficits in their operation. Municipalities operating their own services subsidize them through general taxation. Other municipalities make annual payments (on a yearly lump sum or per call basis) to the ambulance operator or operators that provide the service.

Table 46 provides some information on the type of services operating in the comparison municipalities and in Strathcona County.

None of the comparison rural municipalities have an ambulance service based in the municipality. All of them rely upon services from urban centres. The rural parts of Strathcona County are in a similar situation in that they rely upon the service based in Sherwood Park. The difference is that Sherwood Park is part of the county.

Airdrie is the only one of the four towns which operates its own service, while Grande Prairie is the only one of the four cities which does not. The comparison rural municipalities receive a variety of services depending upon the type operating from the urban centres which provide the rural ambulance coverage.

Note that the population served is larger than the population of the municipality in which the services are based. (See Appendix Table II-1 page A-7 for comparison.) Fort Saskatchewan is an exception.

TABLE 46

Types of Ambulance Service, Population Served, and Calls per Year

	Based in Municipality?	Service Code (see code below)	Est. Population Served	Approx. Annual Calls per 1000 pop. served
Airdrie	Yes	A	14,000	50
Ft. Sask.	Yes	B	13,000	30
Leduc	Yes	B	33,000	55
Spruce Grove	Yes	B	40,000	40
Grande Prairie	Yes	C	35,000	55
Ft. McMurray	Yes	A	33,600	40
Red Deer	Yes	A	49,000	45
St. Albert	Yes	A	45,000	30
County of Leduc	No	B	n.a.	n.a.
County of Parkland	No	B	n.a.	n.a.
MD of Foothills	No	B,C	n.a.	n.a.
MD of Rockyview	No	A	n.a.	n.a.
MD of Sturgeon	No	A	n.a.	n.a.
Strathcona County (Sherwood Park)	Yes	A	48,000	25

Service Type Codes:
A - Municipally-operated with fire department
B - Privately-operated
C - Hospital-operated

n.a. - not applicable

Source: Alberta Ambulance Operators Association.

Technically speaking so is Strathcona County but the Sherwood Park based service is effectively a regional one covering the entire municipality.

There is a fair range in the number of calls per 1000 population served. The Strathcona service has a similar level of activity as St. Albert and Fort Saskatchewan but a level only one-half that of Airdrie, Leduc and Grande Prairie. Those latter three, however, cover an extensive regional area and Airdrie and Leduc also cover heavily-travelled sections of Highway 2 into and out of major cities.

Comparisons of the level of the ambulance services are presented in Table 47. Notice that portions of the comparison rural municipalities except the MD of Foothills are served by ambulances based in the comparison urban municipalities.

The highest levels of ambulance services shown by the comparative data are in Airdrie, Grande Prairie, Fort McMurray and St. Albert. Those four systems have a combination of Advanced Life Support Units (ALSU) manned by paramedics (EMT-P) with accredited attendant (EMT-A) support. Of those four, Airdrie would be rated the highest in terms of population served per accredited staff.

The private operations in the other three towns are quite similar to one another. However, they lack advanced units and staff qualifications especially in relation to Airdrie.

Red Deer has no ALSUs and no paramedics but 80 per cent of its fire fighting staff which operates the ambulance service has attendant level training. This results in a relatively low number of population served by accredited staff.

TABLE 47

Levels of Ambulance Service by Vehicle and Staff Ratings

	Number and Vehicle Ratings[1]	Number and Staff Qualifications[2]	Pop. Served per Accredited Staff[3]
Airdrie	3 ALSU, 1 BLSU	5 EMT-P, 4 EMT-A 18 Other	1,600
Fort Sask.	2 BLSU, 1 ERU	1 EMT-P, 1 EMT-A, 3 RN, 14 Other	2,600
Leduc	3 BLSU, 4 Other	10 EMT-A, 3 RN, 4 Other	2,500
Spruce Grove	3 BLSU, 2 ERU	17 EMT-A, 1 RN, 2 Other	3,100
Grande Prairie	3 ALSU, 1 Other	6 EMT-P, 6 EMT-A, 2 Other	2,900
Ft. McMurray	2 ALSU, 1 BLSU	4 EMT-P, 10 EMT-A, 39 Other	2,400
Red Deer	4 BLSU, 1 ERU	41 EMT-A, 11 Other	1,200
St. Albert	2 ALSU, 1 BLSU	6 EMT-P, 6 EMT-A	3,700
Strathcona County (Sherwood Park)	4 BLSU	2 EMT-A, 27 Other	24,000

Footnotes:
1 see page 113 for vehicle rating information.
2 see page 113 for staff qualifications. RN means registered nurse.
3 Accredited staff excludes 'other' category.

Note:
- County of Leduc eastern half served from Town of Leduc.
- County of Parkland eastern half served from Town of Spruce Grove.
- MD of Rockyview northern half served from Town of Airdrie.
- MD of Sturgeon south-west portion served by City of St. Albert.

Source: same as Table 46.

The service in Sherwood Park must be rated as the lowest. Like Red Deer it lacks the advanced equipment and paramedic training found in the other municipally-operated systems but it also lacks the attendant level training for its fire fighters that Red Deer has undertaken. The population served per accredited staff in Strathcona is grossly out of line with all the other comparison municipalities.

The financial analysis presented earlier showed the highest level of expenditure for Airdrie. It is probably no coincidence that it also shows the highest level of service. But that does not necessarily mean that an upgrading of the Sherwood Park service would result in an excessive increase in costs. The service could match the one in Red Deer if the 27 staff members listed as 'other' in Table 47 received EMT-A training. And the cost of that training would be offset by the service receiving a BLSU rather than ERU rating for user fee schedule purposes (see page 116). More extensive training and additional equipment would be required for the county's service to match those in the other three comparison cities and in Airdrie.

In regard to the service level for the rural part of the county comparisons can be drawn with four of the sample rural municipalities. The MD of Rockyview has its northern half served by the highly-rated Airdrie service while most of the southern half is covered by the full paramedic service from Calgary. The MD of Sturgeon receives partial coverage from St. Albert. The portions of the counties of Leduc and Parkland served by the private services from Leduc and Spruce Grove are the portions most similar to Strathcona in terms of country-residential development. The service received is rated more highly than

Strathcona's due to the extensive numbers of trained staff.

The location of the service at Sherwood Park with a central communication system enables a fairly effective response for the bulk of the county's population. The industrial area and most of the country-residential developments are within a 20 km radius of the hamlet and the average response time in the rural areas was 10.7 minutes, only 7 minutes longer than the average for Sherwood Park.[1] Also the service is on a full-time, on-duty basis unlike some rural areas in other municipalities.

The ambulance service evaluation is summarized in Table 48. It is rated below average primarily due to the lack of trained attendants and the complete absence of ALSUs and paramedics. In particular cost-efficiency is rated low because a major upgrading of the service would not require above average expenditures. The 'satisfaction' and effectiveness ratings have been omitted due to the lack of public opinion survey data.

Before concluding it should be mentioned that the county has plans for improving its ambulance staff qualifications. It is a recognized need. There are also tentative plans for expansion of the ambulance service to a new fire/ambulance station to be built if the proposed urban development in Sherwood Park proceeds. As well, Shell Canada is seeking a commitment for the location of an ambulance at Josephburg to provide coverage for its proposed refinery at Scotford, some nine km to the north. Whether or not these developments occur, the present ambulance service warrants some improvement to match the service levels found in other municipalities.

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[1] County of Strathcona. Fire Department Annual Report 1981.

TABLE 48

Ambulance Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	Low	Below Average	Low
Cost	Below Average	Average	Below Average
Satisfaction	n.a.	n.a.	n.a.
Efficiency	Low	Below Average	Low
Effectiveness	n.a.	n.a.	n.a.

Note: Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

n.a.: Ambulance service not covered by 1979 Burton studies, but see page 118.
Lack of 'satisfaction' data precludes any effectiveness ratings.

G. BYLAW ENFORCEMENT

The enforcement of general county bylaws in Strathcona is the responsibility of four officers and a secretary in the Bylaw Enforcement Services. The land-use bylaw, which generates considerable enforcement-related demands, is administered by another department although Bylaw Enforcement provides some support. Neither the urban or rural detachments of the RCMP are involved to any significant extent in the enforcement of municipal bylaws.

Service activities for Bylaw Enforcement include:

- complaint investigations on matters involving county bylaws and certain provincial statutes.
- provision of support services for other county departments (administration, development, engineering, assessment).
- administration and control of dog licencing.
- vehicular dimension and load permits as well as road ban enforcement.
- participation in the drafting, review and updating of county bylaws.
- organization and operation of a public relations program.

A major contrast between the Strathcona service and that in other urban municipalities is the absence of any business licensing activity. In contrast with some rural municipalities which include building inspection activities under bylaw enforcement, the Strathcona Inspection Services is a separate branch located within general administration.

The majority (75 per cent) of the bylaw enforcement workload pertains to the rural components of the county; for example, dealing with overweight vehicles and packs of dogs.

Financial Analysis

Table 49 presents the data pertaining to bylaw enforcement for Strathcona County and the comparison municipalities.[1]

The gross operating expenditures are relatively high in the urban centres with the exceptions of Fort Saskatchewan and Spruce Grove. This is in sharp contrast to Strathcona County which includes Sherwood Park.

The most comparable urban centre to Sherwood Park is St. Albert which happens to have the lowest expenditure level of the four comparison cities. The St. Albert service is, nevertheless, fairly comprehensive in comparison with Sherwood Park being active in the control of traffic, dogs, noise, weeds and, most notably, businesses.

The three comparison rural municipalities show a very wide range of expenditure. Parkland's expenditure is high due to the inclusion of the expenses associated with its special constable force. The data shown pertaining only to the rural parts of Strathcona indicate a level of activity similar to the MD of Rockyview. But most of Rockyview's expenses are for building inspection activities which are not performed by the bylaw enforcement service in Strathcona.

The operating revenues derived show Strathcona to be relatively low. The absence of business licencing activity limits revenues derived compared to other urban centres. As well, Strathcona chooses not to

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[1] Two of the five comparison rurals are omitted. Those presented include data for services recorded under 'police' as well as bylaw enforcement. Services under 'police' heading represent 93 per cent of the expenditure for Parkland, 97 per cent for Rockyview and 78 per cent for Sturgeon. 'Police' activities are primarily bylaw enforcement because all three rurals receive RCMP services free of charge, although Parkland has its own special county police force.

TABLE 49

ByLaw Enforcement Service, Expenditure and Revenue Data 1981 (1982 for Strathcona)

	dollars per capita			dollars per $1000 EA	
	Gross Operating Expenditure	Operating Revenue	Net Expenditure	Net Expenditure	Revenue as a % of Gross Exp.
Airdrie	27.3	5.9	21.4	5.0	21.4%
Ft. Sask.	4.9	0.3	4.6	0.3	6.6%
Leduc	10.9	13.1	(2.2)	nil	120.9%
Spruce Grove	6.9	10.4	(3.5)	nil	150.2%
Ft. McMurray	24.6	7.1	17.5	3.3	29.1%
Grande Prairie	18.6	17.1	1.5	0.2	92.0%
Red Deer	12.5	17.1	(4.6)	nil	136.2%
St. Albert	7.2	9.3	(2.1)	nil	129.4%
4C Average	15.2	12.9	2.3	0.4	85.0%
County of Parkland*	25.0	11.7	13.3	1.1	46.8%
MD of Rockyview*	4.9	5.5	(0.6)	nil	113.2%
MD of Sturgeon*	0.5	nil	0.5	0.05	nil
Sherwood Park+	0.9 (1.3)	0.3 (0.4)	0.6 (0.9)	0.1 (0.2)	34.2% (27.6%)
Rural Strathcona+	3.5 (6.5)	1.2 (1.5)	2.3 (4.0)	0.1 (0.3)	34.2% (27.6%)
Strathcona County+	2.0 (3.3)	0.7 (0.9)	1.3 (2.4)	0.1 (0.2)	34.2% (27.6%)

Note: See footnote page 62 for explanation of revenue and expenditure data. County of Leduc and MD of Foothills omitted because no expenditures reported.

* includes data reported under 'police' function as well as bylaw enforcement. Parkland's data includes its special county police force, so no RM average is shown.

+ breakdown urban/rural calculated at a 25/75 split of expenditure and revenue. Numbers in brackets are 1982 data.

Source: Financial Statements and calculations by UAG staff.

levy charges for any permits issued reflecting a philosophy that the service should not be revenue-orientated for fear of creating public resistance rather than positive co-operation towards bylaw enforcement. The revenue for Strathcona includes primarily licensing and fines related to dog control.

With the exceptions of Airdrie, Fort McMurray and Parkland, net expenditures shown are quite low and that for Strathcona is near the 4C average especially for 1982. Notice that the 75 per cent of net expenditure attributed to the rural parts of the county results in per capita levels somewhat higher than that for the entire county.

Several of the comparison municipalities show a gain on bylaw enforcement operations with revenues higher than expenditures. Strathcona's percentage of revenue to expenditure, while slightly higher than that of Fort McMurray, is well below the 4C average.

For Strathcona the 1982 data show a considerable increase in gross and net expenditures from the prior year. That is due to an allocation of more resources to the service, despite a general financial policy of restraint, to enable better enforcement in rural areas.

Public Opinion

The 1979 Burton survey did not specifically ask questions about municipal bylaw enforcement. However, if it is accepted that the service is an aspect reflecting upon general county management then the responses in the study would indicate a reasonably high level of satisfaction (see page 71).

Service Efficiency and Effectiveness Comparisons

A notable aspect in comparing the bylaw enforcement in Strathcona County with other municipalities is the very low level of expenditures which pertain to Sherwood Park. Urban centres of a comparable size indicate a much higher level of activity than that of Sherwood Park.

Certain of the comparison urban municipalities are major regional service centres and all have significant central business district development. Business licensing and associated bylaw enforcement as well as traffic and parking control loom large in the service activities.

Sherwood Park, on the other hand, does not engage in business licensing while parking control through meters is very limited. Also, Sherwood Park is essentially a 'bedroom' suburban community with limited commercial development in relation to its population size. The apparent lack of bylaw enforcement activity in the hamlet is more a reflection of its nature - a carefully planned, recently-built, suburban community with thoughtful urban design and high maintenance standards - rather than an indication of a low service level. Bylaw enforcement is basically a regulatory activity, and in relation to comparable-size urban centres Sherwood Park appears to be closer to the ideal of requiring only a minimal bylaw enforcement effort.

The majority (75 per cent) of Strathcona's expenditure is due to enforcement activities in the rural part of the county. The level of these activities is above that reported in the MD of Sturgeon and would be similar to that of the MD of Rockyview if the building inspection costs in Rockyview were discounted. The comparisons with the rural municipalities is complicated, however, by the large expenditure in Parkland County for its special constable force and by the absence of any reported expenditure for the County of Leduc and the MD of Foothills.

The net cost of bylaw enforcement covered by general taxation in Strathcona is about average especially when the 1982 data are considered. In relation to the activities performed however, the net cost is considered above average. This is due to the relatively low percentage of expenditure covered by revenues generated; but the fiscal effort required to cover the net costs is quite low due to the low level of expenditure particularly in relation to Sherwood Park. As well, the cost to the user of the service, through fees, licences and fines, is low in Strathcona compared to most of the other municipalities.

The cost-efficiency of the service is rated as below average due to the low percentage of cost covered by user charges. There would appear to be some scope for Strathcona to recoup a greater proportion of its expenditure on bylaw enforcement through additional licensing fees or increases in fines. However, such a move may counteract the county's efforts to promote public co-operation in bylaw enforcement. Besides, the present level of net expenditure constitutes only a very minor portion of the total municipal operation.

The service evaluation is summarized in Table 50. Satisfaction and effectiveness ratings are not presented due to the absence of public opinion data on the service. In terms of benefits/costs between

Sherwood Park and the rural components, the benefits related to enforcement activities are primarily rural but the net costs are shared equally by all county residents through general municipal taxation.

In future years the county could anticipate increases in bylaw enforcement expenditures. Activities especially in the country-residential portions of the county may warrant some increase in order to maintain adequate enforcement standards. Note that there has been a sizeable increase in expenditures from 1981 to 1982 (see Table 49, page 128). There has been no corresponding increase in the revenues generated however. It could be worthwhile for the county to examine and set out a policy in regard to the cost recovery for bylaw enforcement services. Some increase in revenues from the service could enable increased enforcement activities without causing increased taxation.

In an earlier section on police protection it was mentioned that the county could examine the feasability of establishing its own police force. A review of the bylaw enforcement service and an examination of the county policing procedure used by Parkland should be incorporated in any such study.

TABLE 50

Bylaw Enforcement Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	Average	Average	Average
Cost	Average	Average	Average
Satisfaction	n.a.	n.a.	n.a.
Efficiency	Below Average	Below Average	Below Average
Effectiveness	n.a.	n.a.	n.a.

Note: Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

n.a.: not available due to absence of public opinion data, but see page 129.

Qualifications: The expenditure on the service especially in relation to Sherwood Park is well below average, but average ratings for cost and level are based upon the services which are performed.

The below average rating for cost-efficiency is due to the relatively low percentage of cost recovered from service revenues. But see comments on page 128-129.

H. TRANSPORTATION SERVICES

The main service activity in the transportation category is the improvement and maintenance of roadways. Also included are general public works activities such as that related to storm sewers, sidewalks, lanes and boulevards. Vehicle and equipment pool expenses (common services) are normally associated with the transportation service category. Public transit services are examined in this report under a separate section (see page 167).

There is a mixture of provincial and municipal responsibility for roadways in Alberta. The responsibility of performing and financing the service depends upon the type of roadway and the type of municipality.

Provincial primary highways in rural areas and in towns and villages are a provincial responsibility. Within cities, all roadways are a municipal responsibility but the provincial government provides major financial assistance for the construction and improvements of major arterial roadways and continuous corridors (up to 90 per cent of the cost in some cases).

Provincial secondary highways are financed jointly by the province and municipalities but the municipalities, whether urban or rural, are responsible for the maintenance of secondary highways within their boundaries. Counties and MDs receive major provincial assistance for the service through annual rural road grants from Alberta Transportation.

Local roads and streets are strictly a municipal responsibility. Specific provincial grants are available to the various types of municipalities for local road costs but the major financing is from municipal sources.

The transportation service category is the overwhelmingly dominant service in rural municipalities, representing between 50 and 60 per cent of total annual expenditures. In towns and cities the service normally represents between 10 and 20 per cent of the annual total. In the County of Strathcona, which is a joint rural/urban jurisdiction, the transportation service is by far the dominant one but the percentage of the total it represents, around 35 per cent, is considerably less than other counties and MDs. (See Table 11 page 23 and Table 21 page 46.)

Roads Inventory

Roadways are a vital component in the efficient movement of peoples, goods and services. This is especially true in Strathcona County where there is a wide range of economic activity, diverse types of residential development and high volumes of traffic due to the metropolitan location.

Table 51 presents some basic road data for the four cities and five rural municipalities. Data for Strathcona are presented with Sherwood Park and the rural area broken out from the county totals.

Urban Roads: There are 125 km of roadway in Sherwood Park all of which is paved. The four comparison cities have the vast majority of their roads paved as well, but none are at the 100 per cent figure of Sherwood Park.

TABLE 51

Road Inventory Data, Strathcona County and Comparison Cities and Rural Municipalities 1981 (and 1982 for Strathcona)

		Total km of roads[1]	Per cent of Total[2]				Pop. per km of roads	EA per km of roads[3]
			Paved	Oiled	Gravelled	Other		
Fort McMurray		124.3	93%	-	-	7%	248	$1,323,850
Grande Prairie		195.6	74%	-	-	26%	124	$817,110
Red Deer		484.3	88%	-	-	12%	94	$535,490
St. Albert		181.5	88%	-	-	12%	172	$959,380
County of Leduc		2974	8%	9%	79%	4%	3.7	$40,350
County of Parkland		2821	13%	9%	77%	1%	9.0	$107,470
MD of Foothills		2607	11%	16%	54%	19%	3.5	$35,200
MD of Rockyview		3325	16%	19%	59%	6%	5.1	$70,090
MD of Sturgeon		2376	13%	11%	73%	3%	6.9	$62,010
Sherwood Park	1981	125	100%	-	-	-	230	$1,200,000
	1982	125	100%	-	-	-	238	$1,322,480
Rural Strathcona	1981	1580	2%	89%	9%	0.5%	13.5	$217,760
	1982	1370	3%	71%	26%	0.2%	13.3	$237,180
Strathcona County	1981	1705	9%	82%	8%	0.4%	29.4	$292,700
	1982	1495	11%	65%	24%	0.2%	32.1	$327,930

1: Includes local roads and streets and secondary highways. Primary highways excluded.
2: Road surface for urban centres is 'paved' and 'other' only.
3: EA means equalized assessment.

Source: Alberta Transportation (Municipal Services) and calculations by UAG; and Financial Statements. Sherwood Park data estimates from county staff, Assessment from Appendix Table II-2, p. A-8. 1981 Sherwood Park assessment estimated.

The population and equalized assessment (EA) per km of road shows Sherwood Park at levels very similar to Fort McMurray. The other three cities have levels much lower.

The high density in Sherwood Park has been commented upon earlier (see pages 15 and 16). As well, the community is a recently-planned one in which available residential development space is utilized and in which roadways are well co-ordinated. In that respect it is very similar to Fort McMurray. The result is a high population density and a high level of assessment per km of road.

Rural Roads: The comparison of the data from Table 51 pertaining to rural Strathcona and the five rural municipalities shows Strathcona to be quite unlike the others.

Firstly, the surfacing of the roads is primarily oil. The percentage of the roads with other surface types including paved as well as gravelled is noticeably less than the five comparison rurals.

Secondly, the population and EA per km of roads is much higher in rural Strathcona. The extensive country-residential development is the reason for the high density figures while the industrial assessment of the rural area contributes to the high assessment levels.

Note the differences in rural Strathcona from 1981 to 1982. The km of roads is less due to the area lost by annexation. Also, the percentage of roads oiled decreases noticeably while the percentage gravelled shows a corresponding increase. That is due to a change in road maintenance policy, a change which is discussed more fully in the financial analysis.

The combined totals for Strathcona County are not particularly significant since relevant comparisons with other municipalities can be made only with the Sherwood Park component or the rural component. Notice, however, that roadways in Sherwood Park as a percentage of the total in the county represent less than nine per cent in both years.

Financial Analysis

The data and discussion presented in the financial analysis involves basically a comparison of Sherwood Park with the four cities and a comparison of rural Strathcona with the five rural municipalities.

Several adjustments, estimations and re-organizations of the data have been necessary to enable the comparisons to be made. These are discussed below prior to the presentation of comparative data.

The Data Presented

In the initial service description in this section it was noted that expenses of vehicle and equipment pools, that is, 'common services,' are associated with the transportation service. But things are not quite that straightforward. The 'common services' function is of significance, to varying degrees, for services other than road maintenance.

In Strathcona County for 1981 and earlier years, the financial accounting of 'common services' entailed numerous internal charge transactions which were of little real significance except "on paper." The effect was to inflate expenditure totals for services such as transportation and to inflate revenue totals for the common service function. In 1982 the county administration made a concerted effort to remove as many of the paper transactions as possible in order to present a less distorted financial picture.

Strathcona's internal accounting procedure used in 1981 was relatively unusual. Consequently, in order to compare the 1981 data of the county with its 1982 data or with other municipalities in 1981 several adjustments were necessary. Note that these adjustments were in addition to the usual discounting procedure used for expenditures and revenues throughout this report (see footnote page 62) and that they apply only to the county's 1981 data.

Expenditure Adjustments for 1981: The county's 1981 financial statement indicates total transportation service costs (that is, common services and roads, streets, etc.) to be $19.1 million. The normal discounting procedure for capital-related items, debt charges and transfers to reserves and other funds results in a gross expenditure figure of $13.9 million. But further discounting is necessary to obtain data for comparisons.

The additional discounting pertains to internal charges for vehicle maintenance services on public works equipment. The charges show up as service revenues in the common services function and as an expenditure under the roads maintenance service function. The amount involved in 1981 is estimated to be $1.2 million. Consequently, the gross expenditure of 1981 used for comparisons of the transportation service is $12.7 million.[1]

Revenue Adjustments for 1981: The 1981 financial statement indicates $7.4 million in revenues for 'common services' and the road maintenance service. The normal discounting employed in this report results in a figure of $5.25 million. Three other discounting steps are necessary to obtain data useful for comparisons.

Firstly, the $1.2 million in internal charge revenues discussed above needs to be discounted from common services revenue.

Secondly, an adjustment is necessary to the 'other revenue from own sources' received in 1981. The amount included $1.88 million in extraordinary development levy payments which accrued in that year. That amount was immediately converted on the expenditure side into reserve funds. The expenditure side has been discounted through the normal procedures; the revenue side requires the additional discounting of the $1.88 million.

Thirdly, the 'sales of goods and services' revenue reported requires an adjustment. Approximately $834,000 of that revenue in 1981 was raised (through an equipment auction and general taxation) for allocation to equipment replacement reserves. The reserve expenditure has been discounted through the normal procedure; the revenue side requires discounting of the $834,000.

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[1] The additional $1.2 million discounted includes some internal charges accruing to the common services function from services other than road maintenance but those would be at least partially offset by internal charge revenue credited to road maintenance for services to other departments.

The result after the three special adjustments is a revenue figure for transportation services of $1.3 million.

Total County Revenue and Expenditure

Table 52 presents the expenditure and revenue data used for Strathcona County for comparisons of transportation services. Note that in both years the financial statement functions of common services and road maintenance services are combined. The special adjustments noted above for 1981 are indicated.

A significant decrease in the net expenditure for the county occured from 1981 to 1982 ($11.4 million to $8.1 million). The reduction is attributable to:

- annexation, resulting in a reduction of approximately 200 km in the roads to be maintained (see Table 51 p. 136),
- a conversion of some oiled roads to a gravelled standard as a deliberate cost-cutting measure (see Table 51 p. 136), and
- a contraction in the patching program combined with savings from significantly lower contract rates on the projects undertaken.

Urban/Rural Breakdown

In order to enable meaningful comparisons with other municipalities it is necessary to break down the transportation service

TABLE 52

Transportation Service Revenue and Expenditure Strathcona County 1981 and 1982

	1981	1982
Expenditure reported in Financial Statement	$19,110,609	$11,319,339
Gross Expenditure after Normal Discounting[1]	$13,984,192	$ 9,406,877
Gross Expenditure after Special Adjustments[2]	$12,772,192	$ 9,406,877
Revenue reported in Financial Statement	$ 7,389,130	$ 1,732,784
Revenue after Normal Discounting[1]	$ 5,255,502	$ 1,309,800
Revenue after Special Adjustments[2]	$ 1,329,153	$ 1,309,800
Net Expenditure[3]	$11,443,039	$ 8,097,077

[1] see footnote page 62.

[2] see pages 138 to 141 for explanation.

[3] Calculated as 'gross expenditure after special adjustment' minus 'revenue after special adjustment.'

Source: County of Strathcona Financial Statement and calculations by UAG staff.

expenditures and revenues of the county into the urban (Sherwood Park) and rural components. For that purpose the trial balance data from the county administration is used.

The trial balance provides considerable detail by sub-functions and it forms the basis for financial allocations according to the various components of the county. The expenditure allocation is derived from the estimates of the percentage of work attributable to components of the county as shown in Table 53.

Those estimates relate to the 1982 situation when 70 per cent of expenditures was incurred in the rural area, 26 per cent was incurred in Sherwood Park and the remaining four per cent was related to the industrial area or was contracted out. In 1981 the rural share was estimated to be 76 per cent due to a relatively large patching expenditure in that year while Sherwood Park's share was 20 per cent.

The expenditures attributable to the common services (vehicle and equipment pool) could not be allocated on the basis of engineering staff estimates. Instead the allocation is based on the 1982 urban/rural expenditure split excluding debt charges. This results in an allocation of 75 per cent rural and 25 per cent urban. Considering the amount of equipment required for rural construction and maintenance, and considering that much of the urban maintenance is done on a contract basis, the 75/25 split for common services appears realistic.

The breakdown of revenues received in transportation services is based upon several assumptions since no estimates similar to those for expenditures are available. Major revenue categories are sales of

TABLE 53

Transportation Expenditures - Urban/Rural Breakdown (1982)

	Percentage of Work			
Activity	Rural %	Industrial %	Urban %	Charge Out %
Street Lighting	3	3	94	
Engineering	35	17	48	
Public Works Administration	75	3	20	2
Snow Removal	35	4	51	10
Sanding	41	10	49	
Brushing	99	1		
Gravel Road Maintenance	100			
Oil Road Maintenance	100			
Patching	99	1		
Urban Drainage		9	91	
Rural Drainage	100			
Street Sweeping		5	95	
Line Painting			100	
Signing	55	2	43	
Main Shop	75	3	20	2
Josephburg Shop	100			
Other Maintenance	61		3	36
Asphalt Maintenance	1	3	94	2
Road Construction	100			
Concrete Maintenance			100	
Traffic Services		10	90	

Source: Engineering Services, County of Strathcona.

goods and services and provincial grants.

For sales of goods and services revenue it is assumed that the urban/rural split is similar to the expenditure breakdown, that is, 80 per cent rural and industrial/20 per cent Sherwood Park in 1981 and 74 per cent rural and industrial/26 per cent Sherwood Park in 1982.

The main provincial operating grant received is the grant to counties and MDs from Alberta Transportation. The calculation of this grant is discussed later on in this section but for purposes of the rural/urban split 100 per cent of the grant is allocated as rural revenues.

Other less significant conditional grants include interest stabilization monies. At present all of these revenues ($82,460 in 1981 and $95,830 in 1982) except for about $6000 are generated by debentures for projects within Sherwood Park.

A small amount of grant revenue (about $10,000 to $20,000) is received to assist with general engineering services expenses. In 1982 a grant of approximately $70,000 was received for traffic services expenditures. In terms of the rural/urban split both of these minor grant items are allocated on the expenditure breakdown, that is, 80 rural/20 urban in 1981 and 74 rural/26 urban in 1982.

The revenue breakdown which results is quite similar to the expenditure breakdown with the rural road grant factor increasing the revenue percentage from the rural component slightly. Table 54 shows the results of the urban/rural breakdown using the expenditure and revenue figures presented earlier in Table 52.

TABLE 54

Transportation Service - Urban/Rural Financial Breakdown

	1981		1982	
	$'s	% of total	$'s	% of total
Sherwood Park				
- Gross Expenditure	2,554,438	20.0	2,445,788	26.0
- Operating Revenues	244,564	18.4	276,368	21.1
- Net Expenditure	2,309,874	20.2	2,169,420	26.8
Rural Strathcona				
- Gross Expenditure	10,217,754	80.0	6,961,089	74.0
- Operating Revenues	1,084,589	81.6	1,033,432	78.9
- Net Expenditure	9,133,165	79.8	5,927,657	73.2
Strathcona County				
- Gross Expenditure	12,772,192	100	9,406,877	100
- Operating Revenues	1,329,153	100	1,309,800	100
- Net Expenditure	11,443,039	100	8,097,077	100

Source: see Tables 53 and 54 and discussion in text pages 143 to 145.

Financial Comparisons

Table 55 presents revenue and expenditure data for the comparison cities, rural municipalities and Strathcona County. The discussion below relates the data for Sherwood Park to the cities and the data for rural Strathcona to the rural municipalities.

Before proceeding some qualification of the comparison municipality data is necessary. Unlike the data for Strathcona, that for the other municipalities has not been subjected to a detailed examination. Particularly in regard to the sample cities the comparability of the revenue data is suspect. Note for example the very high levels of revenue for Grande Prairie and Red Deer. In fact the abnormal grant revenue reported for Grande Prairie results in an almost negligible net expenditure on transportation services. For these reasons the main expenditure level indicators are presented in terms of gross rather than net expenditure.

Urban Transportation Service: Transportation services within Sherwood Park are predominantly maintenance-related. Since the community is comparatively new, roads are in good condition and expenditures consist mainly of such services as street lighting, traffic control, snow removal, street cleaning and some re-paving.

Certain special factors exert a particular influence on the expenditure and revenue pattern in Sherwood Park which are of significance in making comparisons with other urban centres.

First, most of the roads, including the arterials, were

TABLE 55

Transportation Service Expenditure and Revenue Data Cities, Rural Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

		dollars per capita			dollars per km of roads	dollars per $1000 EA
		Gross Operating Expenditure	Operating Revenue	Net Expenditure	Gross Expenditure	Gross Expenditure
City of Fort McMurray[1]		110.0	6.9	103.1	27,230	20.6
City of Grande Prairie[2]		79.2	79.1	0.1	9,780	12.0
City of Red Deer[3]		129.6	86.9	42.7	12,150	22.7
City of St. Albert[4]		93.4	52.8	40.6	16,040	16.7
County of Leduc[5]		488.7	109.3	379.4	1,800	44.6
County of Parkland		318.8	88.4	230.4	2,870	26.7
MD of Foothills[5]		310.3	75.2	235.1	1,080	30.7
MD of Rockyview		448.6	104.3	344.3	2,275	32.5
MD of Sturgeon		263.3	58.8	204.6	1,810	29.2
Sherwood Park	1981	88.7	8.5	80.2	20,435	16.5
	1982	82.2	9.3	72.9	18,060	13.7
Rural Strathcona	1981	480.1	51.0	429.1	6,470	29.7
	1982	382.8	56.8	326.0	5,080	21.4
Strathcona County	1981	255.0	26.5	228.5	7,490	25.6
	1982	196.2	27.3	168.9	6,290	19.2

[1] About 3/4 of operating revenue is local improvement taxes. No grant revenue is indicated.
[2] Very high grant revenue reported plus local improvement taxes.
[3] Very high revenue from 'rentals,' plus local improvement taxes and fines.
[4] Revenue includes large portion as 'revenue from other own sources' and a large tax revenue item.
[5] Do not show a separate accounting of common services.

Note: see footnote page 62 for explanation of expenditure and revenue data.

Source: Financial Statements.
Also see Table 53 and 55 for Strathcona data calculations.
See Table 52 for road km.
Population and Assessment Calculations based on Appendix Tables II-1 and II-2 (p. A-7 and A-8).

originally financed by developers and therefore there were no debentures for the original construction. Consequently Sherwood Park derives little revenue from local improvement taxes unlike Grande Prairie, Red Deer and St. Albert.[1]

Second, because Sherwood Park is a new community, designed for a certain size, little upgrading of the original road network has been required to date. But in future years more reconstruction and maintenance will be required which will bring the situation in Sherwood Park more into line with that of other large urban centres. (Also see comments on pages 157 to 158.)

Third, due to Strathcona's integrated urban/rural nature there is a benefit to the urban component due to economies of scale. Expenditures on machinery, equipment and personnel are likely less than other urban centres because Sherwood Park is serviced as part of the entire county rather than as a separate entity.

Fourth, expenditures in Sherwood Park may have been kept down in recent years because, as an unincorporated hamlet, it has not been eligible for the major financial assistance available to cities especially capital cost assistance for arterial roadways.[2] For example, the planned six year allocation (1979/80 - 1984/85) under the Urban Transportation Assistance Program, excluding funds for public transit, is as follows[3]:

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[1] The recent re-construction of Sherwood Drive and Oak Street was financed by debenture as was the commercial section of Wye Road.

[2] Current improvements to Wye Road are to be assisted by provincial grants through a special arrangement.

[3] Source is Alberta Transportation.

Fort McMurray	$ 7,461,000
Grande Prairie	$ 7,496,000
Red Deer	$13,963,000
St. Albert	$17,017,000
Sherwood Park	nil

Fifth, the total km of roads in Sherwood Park is relatively low in relation to its population size (see Table 51 page 136). The community is well-planned, compact and has little vacant land. These features help to reduce overall transportation service expenditures.

From Table 55 it can be noted that the gross expenditure per capita in Sherwood Park is somewhat lower than three of the four comparison cities. The gross expenditure per km of road, however, is higher than all but Fort McMurray while the expenditure per $1000 EA, especially in 1982, is lower than all but Grande Prairie.

Rural Transportation Service: The rural roads in Strathcona County consist mainly of a grid system of two-lane roads most of which have an oiled surface. This is in stark contrast to other rural municipalities in which the vast majority of roads have a gravelled surface (see Table 51 page 136).

The oiled surfaces are much superior to gravelled or graded earth surfaces but they are also much more expensive. The cost of gravelling a road is approximately $3000 per mile while the oiling process used by Strathcona costs approximately $27,000 per mile.[1]

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[1] It is a cold-mix process in which a fresh layer of gravel is sprayed with oil, graded from side to side to mix it and then compacted.

The maintenance costs for oiled roads are also high. After the first two or three years an oiled road becomes subject to break-up and frequent patching is necessary. After three or four years of patching, the road requires re-oiling.

Roads are oiled in Strathcona due to the high level of demand placed upon them. Industrial traffic is prominent; extensive country-residential development generates a large volume of commuter traffic; and there is the general effect of being in a metropolitan region. Because of the high traffic volumes on the rural roads a large and continual maintenance and reconstruction program is required.

The high standard of the roads and the heavy traffic upon them results in Strathcona having a much higher level of expenditure per km of road than the comparison rural municipalities. However, the gross expenditure in terms of per capita and per $1000 EA is well within the range shown by the other rurals (see Table 55 page 152). This is especially true in 1982 when a number of roads were converted to a gravelled surface to reduce expenditures.

The net expenditure for rural Strathcona is considerably higher than the other rural municipalities due to its relatively low level of operating revenues. The main revenue source for all rural municipalities is the road grant to counties and MDs from Alberta Transportation.

The amount of the grant is calculated through a formula using factors related to open road mileage, population per mile, per capita equalized assessment and the local terrain conditions. For Strathcona the data used includes some that pertain to Sherwood Park as well as

TABLE 56

Alberta Transportation Road Grants to Counties and MDs, Comparison Rural Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

	Regular Road Grant			
	$'s	$'s per capita	$'s per km of road	as a % of Gross Expenditure
County of Leduc	407,710	37	137	7.6%
County of Parkland	568,149	22	201	7.0%
MD of Foothills	399,508	44	153	14.2%
MD of Rockyview	541,288	32	163	7.2%
MD of Sturgeon	440,425	27	185	10.2%
Rural Strathcona				
1981	260,678	12	165	2.5%
1982	301,816	17	220	4.3%

Source: Alberta Transportation and calculations by UAG staff.

the rural parts of the county. Preliminary analysis indicates that the grant would be larger if only rural data were used.

A comparison of grant monies received appears to confirm this. Refer to Table 56 where particularly in per capita terms and as a per cent of expenditure Strathcona receives a much lower grant than the other municipalities. However, in terms of the grant per km of road Strathcona is near the average in 1981 and rises sharply in 1982 primarily as a result of roads lost in the annexation.

As a quick summary of the financial analysis of the transportation service the following points can be made:

- In comparison with the sample cities, Sherwood Park has an expenditure per capita and per $1000 EA somewhat lower, but an expenditure per km of roads which is higher.
- In comparison with the sample rural municipalities, rural Strathcona has an expenditure per km of road much higher but an expenditure per capita and per $1000 EA which is roughly average.
- Strathcona County receives considerable less grant monies than the comparison municipalities because Sherwood Park is ineligible for grants provided to cities and because the rural road grant is calculated using some Sherwood Park as well as rural Strathcona data.

Public Opinions

The Burton survey, conducted in 1979, yields the best available opinion data on public satisfaction with the provision of transportation services in the County. It may be significant that the survey was conducted during the month of April at a time when all roads tend to be in their poorest condition after winter has taken its toll and before maintenance crews have had the opportunity to remedy major deficiencies.

Apart from 'hospital services' the 'roads and road services' category attracted the strongest negative opinions of all the services surveyed. In a general situation where most people tended to rate most County services as 'good' the road/road services category is also significant for attracting the highest proportion of those respondents prepared to rate a service as only 'average.' Certain other services attracted a lower proportion of 'good' ratings, but with the exception of hospital services, those tended to be services which involved very low response rates.

Overall, 26.5 per cent of survey respondents rated the service provision as 'bad,' 38 per cent felt it was 'average' and 34.6 per cent placed it as good (see Table 57, p. 155). Those living on rural subdivisions were the least satisfied while the traditional rural population were the most satisfied. Urban respondents tended to favour the 'average' rating.

The respondents from electoral divisions #1 (since annexed by the City of Edmonton) and #3 (south-east rural area) were particularly dissatisfied, while the most satisfied respondents were concentrated in EDs #5 (northern rural area with a relatively high proportion of traditional rural population), #6 (Sherwood Park N.E.), and #4 (central rural area with a mix of different types of rural resident and served by Highway 16). Most respondents in the other four divisions rated the service provision as 'adequate.'

TABLE 57

Public Satisfaction Ratings:
Roads and Road Services

		Bad %	Average %	Good %
1.	County as a whole	26.5	38.0	34.6
2.	Urban respondents	22.3	41.0	35.8
	Rural subdivision respondents	36.9	32.5	29.8
	Traditional rural respondents	16.2	35.3	48.5
3.	Urban electoral divisions average	18.3	43.5	37.6
	Rural electoral divisions average	36.1	29.4	33.3

Source: Appendix III. Tables III-3 (p. A-54) and III-6 (p. A-61) and calculations by U.A.G. staff.

Given that the acreage population is much more numerous than that classified as 'traditional rural' more weight must be given to the opinions of the former. On this basis it seems that the service to Rural Strathcona must be rated as only average to below average in terms of public satisfaction. For Sherwood Park the verdict appears to be more positive, justifying a public satisfaction rating of average to slightly above average. For the County as a whole the service would appear to merit an average rating.

Service Efficiency and Effectiveness Comparisons

Table 58 (page 156) summarizes the transportation service comparisons. Note that expenditure data used is 'gross expenditure.' That is done to avoid distortions arising from revenues reported by the comparison municipalities, especially the cities.

TABLE 58

Transportation Service Comparisons, 4C and 5RM Averages and Sherwood Park and Rural Strathcona 1981

	4C Average	Sherwood Park	5RM Average	Rural Strathcona
Roads Inventory				
- per cent paved or oiled	85%	100%	25%	89%
- pop. per km of road	133	230	5.6	13.5
- EA per km of road	768,840	1,200,000	63,485	217,760
Gross Expenditure ($'s)				
- per capita	107	89	358	480
- per km of road	14,297	20,435	1,995	6,470
- per $1000 EA	18.6	16.5	31.4	29.7
Regular Road Grant ($'s)				
- per capita	n.a.	n.a.	30	12
- per km of road	n.a.	n.a.	167	165

n.a. not applicable

Source: see Tables 51 to 56.

Service Level

Most roads within Sherwood Park are in good condition with only a few sections requiring re-surfacing. The newness of the community leads to road standards that are high in comparison with similar-sized urban centres in Alberta. Note that 100 per cent of the roads in Sherwood Park are paved compared to the 4C average of 85 per cent.

Recent road needs studies done for Sherwood Park, St. Albert and Grande Prairie generally confirm the rather high standard prevailing in Sherwood Park.[1]

The studies estimated that to correct current and anticipated deficiencies in the road network expenditures required over the next five years would be $30.6 million in Sherwood Park, $27.8 million in St. Albert and $20.6 million in Grande Prairie.

The bulk ($25 million) of the Sherwood Park expenditure is attributed to arterial roadway improvements. Some of these improvements are underway in 1983, especially in regard to Wye Road. Much of the estimated expenditure, however, is based upon assumptions of rather high growth rates for Sherwood Park particularly in respect to the proposed eastern extension of the community. With the present economic downturn the need for some of the recommended arterial improvements may not be so urgent.

The other expenditures recommended for Sherwood Park are $4.2 million to resurface and/or base and resurface local and collector roads, and $1.46 million for resurfacing of some local roads currently in poor condition.

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[1] GCG Engineering Partnership: Roadway Needs Study - Sherwood Park and St. Albert, Feb. 1982 and DeLCan Consulting Engineers and Planners: Grande Prairie Roads Need Study, Feb. 1982.

The St. Albert study, which was done by the same firm as the study for Sherwood Park, anticipated that $20 million would be required for arterial improvements. A smaller proportion than in Sherwood Park of that expenditure was related to servicing anticipated new growth, thereby implying a lower standard of arterial roads currently. A further $6.8 million was estimated for work on collector and local roads while $1.02 million was estimated for correcting present deficiencies in the local roads.

For Grande Prairie the bulk of the $20.6 million expenditure estimate was for correcting present roadway deficiencies.

In summary then, the roads need study indicated that roads in Sherwood Park are presently in good condition, that only a few minor stretches warrant resurfacing, and that the major expenditures in the future would be for increasing the capacity of some of the arterials to accommodate traffic generated by new growth and development. Also expenditure increases could be expected in the future for regular maintenance and repair of roadways which presently are only a few years old.

In regard to the rural roads of the county a very high level of service exists. The proportion of rural roads in Strathcona (excluding primary highways) which is oiled or paved is 85 per cent compared to the 4C average of 25 per cent.

That percentage in Strathcona drops to 74 per cent in 1982 due to expenditure restraints and the loss of roads in the area annexed to Edmonton and Leduc County. Nevertheless the proportion of roads which are above the normal rural gravelled standard remains very high.

Future major expenditures are anticipated especially in the relatively densely-populated areas of country-residential development. In particular, Baseline Road and Wye Road, which serve as the main routes for the country-residential areas, probably will require major improvements and widening. The extent to which these improvements will be undertaken depends largely upon whether the high growth rate of the country-residential sector persists through the mid-1980's and whether major provincial assistance is forthcoming.

Service Cost

The comparison of gross expenditure levels (see Table 58 page 156) indicates that the high standards of roads in the county require a rather high level of expenditure.

In regard to Sherwood Park the per capita expenditure is lower than the 4C average but the expenditure per km of road is some 40 per cent higher. This appears to be related to the unusual compactness of the community and the fact that all roads are paved.[1]

As might be expected given the high standard of rural roads, the expenditure in Strathcona is much higher than the 5RM averages. In fact the expenditure per km of road is over three times the rural average.

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[1] Remember that service expenditures for Sherwood Park are based upon the engineering department's estimates. If a margin of error of ± 20 per cent is assumed then the range in terms of expenditure per km would be $14,000 to $22,560. The lower figure would be almost identical to the 4C average. Note also that other cities have extensive undeveloped areas within their boundaries. This would tend to lower their per km figures compared to Sherwood Park.

Despite these indicators of considerable service effort the transportation expenditures are not out of line with available tax resources. Expenditures per $1000 EA is very near the relevant averages for both Sherwood Park and rural Strathcona, each being slightly below average.

This somewhat surprising outcome must be interpreted as being largely a consequence of system efficiencies and economies of scale which stem from the integrated rural/urban nature of the county. Conventional municipalities, whether urban or rural, would encounter greatly increased expenditures if they attempted to match Strathcona's level of service.

This point is substantiated by reference to staffing data (see Table 59 page 161). The full-time staff per 1000 population in Strathcona County is lower than all comparison municipalities except Red Deer and the MD of Sturgeon and those two have substantial numbers of part-time staff. The level of 1.8 in Strathcona is much lower than the 4C average (2.8) and 5RM average (2.9).

The system economies especially in relation to servicing Sherwood Park are evident in comparing the numbers of full-time staff per 100 km of roads. That level in Strathcona is higher than the rural average but it is well below the 4C average.

The fact that Strathcona County is of a relatively small area and that the densely-populated rural area is, by and large, reasonably near to Sherwood Park contributes to the ability of the county to service both the urban and rural areas with a full-time staff complement which would be about average for the urban area alone.

Comparative data on machinery and equipment is not presently available. But it is logical to assume that the economies of scale

TABLE 59

Public Works Staff Data, Comparison Cities and Rurals and Strathcona County 1981 (and 1982 for Strathcona)

		Full-Time Staff Numbers	Full-Time Staff per 1000 pop.	Full-Time Staff per 100 km roads	Part-Time Staff Numbers
Fort McMurray		100	3.2	80.5	-
Grande Prairie		72	3.0	36.8	24
Red Deer		70	1.5	14.5	20
St. Albert		130	4.2	71.6	-
4C Average		93	2.8	37.7	n.a.
County of Leduc		33	3.0	1.1	37
County of Parkland		101	4.0	3.6	-
MD of Foothills		21	2.3	0.8	11
MD of Rockyview		43	2.5	1.3	-
MD of Sturgeon		27	1.6	1.1	19
5RM Average		45	2.9	1.6	n.a.
Strathcona County	1981	90	1.8	5.3	-
	1982	90	1.9	6.0	2

Source: Financial Statements and calculations by UAG staff.

evident for staff numbers would also apply to the amount of equipment required.

Given the high standards attained, and the considerable effort invested (without placing any extraordinary demands on the available tax base resources), there remains only the question of whether the County of Strathcona is possibly overserviced in the transportation area. One factor already alluded to is how the County appears to have deployed the 'savings' associated with its integrated operation in the provision of above average service levels. Conceivably the 'savings' could have been viewed as a means of keeping taxes down, while maintaining service levels which were adequate, though lower than those now prevailing. Other factors must be taken into account however.

With regard to Sherwood Park the county has tended to escape major expenditure obligations until recently. The comparative newness of the community and the consequent good road conditions have required the provision of only general services (street lighting, traffic services, snow removal, etc.) with little in the way of significant maintenance expenditures. Because the roads were financed by developers there have been no debentures for the original construction.

This situation is changing rapidly however as plans are laid for a new growth phase involving a doubling in population by early next century. Apart from bearing some of the front-end costs of providing for this new development, before it actually materializes, increased expenditures may also be anticipated in regard to major improvements of existing collector and local roads as they begin to deteriorate.

Expenditures on transportation services in Sherwood Park have also been kept down recently because the county has not been eligible to receive grants under the Province's Urban Transportation Assistance Program (other than public transit assistance). Had the county been able to take advantage of this program it is conceivable than an even higher service level could have been attained, especially in the newer parts of Sherwood Park such as Glen Allan where some arterial stretches need re-basing.

The high standards sought and the effort expended by the county in servicing the rural areas is as much out of necessity as choice. The rural population density is three times greater than the average for the comparison rurals (see page 14) and this high density results in a number of persons per km of road almost 2.5 times the 5RM average (see Table 58 page 156).

As well, the rural population, especially the country-residential sector, has been growing quite rapidly in recent years (see page 13). As a consequence the county has had to face continually increasing demands for improved road services.

Because the county has been treated strictly as a rural municipality (with no special recognition of the hamlet of Sherwood Park) transportation-related grant revenue has been lower than might normally be expected. Sherwood Park is ineligible for major roadway assistance because it is not a city yet the presence of Sherwood Park appears to contribute to a relatively low rural road grant.[1]

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[1] In 1981 the total provincial transportation grants (excluding those for public transit) received by Strathcona amounted to $10 per capita using the population of the entire county, or $24 per capita using only the rural population. By comparison the 5RM average was over $72 per capita. (Source: Financial Statements.)

Service Satisfaction

The Burton survey data reviewed earlier (see pages 153 to 155) revealed a rather low satisfaction rating especially in relation to the levels expressed for other major municipal services. Given the apparently high standards of the service the survey results are somewhat surprising.

It is significant, however, that traditional rural residents were noticeably more satisfied than country-residential residents. The dissatisfaction expressed by those on acreages may be attributable to comparisons with previous urban experiences. There is little doubt, however, that the main routes for the country-residential sector are congested at times and increasing the capacity of those roads is a recognized requirement.

Cost-Efficiency and Effectiveness

The overall service evaluation is summarized in Table 60. As with many other municipal services, the comparative ratings require some qualification because of the absence of any other municipality in Alberta which has the combined urban/rural structure of Strathcona.

The integrated nature of the county appears to lead to notable service efficiencies especially in relation to those in Sherwood Park. To date much of the associated savings have been expended, out of necessity, in providing a high standard of service in the rural areas.

The urban/rural expenditure breakdown estimated for this report shows that (for 1982) roughly 25 per cent of costs are urban

TABLE 60

Transportation Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	High	Very High	High
Cost	Low	High	Average
Satisfaction	Above Average	Below Average	Average
Efficiency	Very High	Average	Above Average
Effectiveness	High	Low	Average

Note: possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

related and 75 per cent are rural related. The net costs are shared equally by all county residents through general taxation.

Although the county provides transportation services without discrimination between its urban and rural (and industrial) components, it is clear that at any one time it faces radically different types of demand from each. The demand pattern can be expected to shift through time, for instance, as rural growth stabilizes, as Sherwood Park enters a new phase of expansion, or as a new industrial area is developed.

The challenge for the county, especially in conjunction with its overall program of expenditure restraint, will be to pare service costs while increasing the levels of service satisfaction. This could be accomplished by:

- negotiating a more equitable treatment for the road maintenance grant in rural areas and capital assistance for major urban roadways;
- further rationalization of rural service levels such as the reduction of road oiling undertaken between 1981 and 1982; and the examination of a system of rural road classification for the purpose of road surface standards;
- a public information campaign which explains the comparatively high service level provided, its associated high costs especially in rural areas and possible alternative service levels and their tax implications.

I. PUBLIC TRANSIT

The County of Strathcona provides a public transit service within Sherwood Park and to and from the City of Edmonton. Twenty buses are owned by the county and are operated under a contract with Edmonton Transit which provides the drivers, maintenance and garage facilities.

There are six routes in total. Two routes provide a corridor service to Edmonton and during the peak hours the number of buses used is increased. Two routes are feeders within Sherwood Park to the corridor service. Two morning and late afternoon runs to the University of Alberta (in Edmonton) are provided during the September to April University term.

The regular service is supplemented during morning and late afternoon peak hours by six buses leased from the Strathcona County school system. Late night paratransit service is provided by a county owned and operated mini-bus which ties into the corridor service.

Strathcona Transit is used by over 500 school students which otherwise would require transportation by the county school bus system. This arrangement results in a considerable saving to the school bus operation and a reimbursement is made to the transit system.

The present contract arrangement with the City of Edmonton is advantageous in that it allows for service connection and co-ordination with Edmonton Transit. The county also avoids the high initial costs of constructing garages and maintenance facilities. A potential problem exists in that the county loses direct control over operating costs.

Adult fare for the service within Sherwood Park is $0.65 while that for the service to Edmonton is $1.35. Monthly passes sell for $40. The corridor fare is valid for a transfer to the Edmonton Transit system and those riding Edmonton Transit may transfer to Strathcona Transit by paying the difference in fares (currently $0.50).

The transit system is operated primarily as a service to the residents of Sherwood Park, especially for those that commute to Edmonton. This corridor service accounts for 80 per cent of the annual ridership. However, the county has encouraged near-by rural area residents to utilize the service through construction in 1982 of a park-and-ride facility (103 stalls) in Sherwood Park. Based on the use of this facility, which has already reached its designed capacity, approximately eight per cent of the rides on the corridor service are by non-Sherwood Park residents.

The transit service has been in full operation since 1977. Ridership trends to 1981 are indicated below:[1]

	Avg. Monthly Ridership	Rides per capita
1977	20,330	0.77
1978	35,207	1.33
1979	29,803	1.12
1980	38,305	1.39
1981	47,887	1.66

The decrease in rides between 1978 and 1979 prompted the first concerted effort to improve the service through changes in routes and scheduling. That resulted in a return to a rising trend. It is known that the six-week bus drivers strike in 1982 in combination with a fare increase caused another reversal between 1981 and 1982, but preliminary data from late 1982 onwards indicates that the rising trend has resumed.

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[1] Based upon Table 1 page 5 of "Strathcona Transit" by J.J. Bakker (Jan. 1982). For 1981 only first six months' figures were available. Rides per capita based on Sherwood Park population only.

Financial Analysis

The operating revenues and expenditures of Strathcona Transit for 1981 and 1982 are shown in Table 61. Care must be exercised in comparing the two years. In 1982 there was a strike during February and March which reduced the total number of operating hours from 31,889 in 1981 to 28,718 in 1982. Also there was the elimination of service in the Maple Ridge Trailer Park which is located in the area annexed by Edmonton.

The main expenditure item is the contract with Edmonton Transit. The amount paid is determined through an hourly rate which includes costs for drivers, fuel, tires, storage, maintenance, administration and training. In 1981 the rate was $31.20 per hour; in 1982 it was $37.76 per hour.[1]

The expense of leasing county school buses is determined by the hours of operation multiplied by an hourly rate. In 1982 the hourly rate was $24, set at a cost-recovery level.

In both years, the transit fares covered approximately 35 per cent of operating expenditures. This is near normal in comparison with

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[1] The rates are adjusted each quarter. The above rates are for the first quarter of each year.

TABLE 61

Strathcona Transit Expenditures and Revenues 1981 and 1982

	1981		1982	
	$'s	% of Op. Exp.	$'s	% of Op. Exp.
OPERATING EXPENDITURES				
Edmonton Transit Contract	1,000,508	69.3	1,052,508	75.3
County School Bus Leasing	103,356	7.2	99,978	7.2
Para Transit (Mini-bus)	74,146	5.1	52,527	3.8
Salaries, Materials, Supplies	212,916	14.7	164,539	11.8
Bank Charges and Interest	52,758	3.6	28,662	2.0
TOTAL OPERATING EXP.	1,443,684	100	1,398,214	100
OPERATING REVENUES				
Transit Fares	493,580	34.2	499,257	35.7
Provincial Grants	298,304	20.7	332,951	23.8
Other Revenue	4,952	0.3	9,999	0.7
TOTAL OPERATING REV.	796,836	55.2	842,207	60.2
NET OPERATING COST	646,848	44.8	556,007	39.8

Source: Financial Statements, Trial Balance data and discussions with county staff.

other cities such as Red Deer, Edmonton and St. Albert where fares covered 35 to 40 per cent of costs.

The provincial grants for public transit, based on $10 per urban resident and $2 per rural resident, covered in excess of 20 per cent of costs.

The net operating costs are covered through general municipal taxation on all property in the county. In terms of the net cost per $1000 EA the amounts are $1.30 in 1981 and $1.13 in 1982.

In addition to the operating expenditures Strathcona County spent $1,093,130 on capital items in 1981 and 1982. The major expenses were the acquisition of buses and the construction of the park-and-ride facility. Almost 75 per cent of the capital expense was covered by provincial grants.

Public Opinions

The public opinion survey of Sherwood Park conducted by Gary Gahr in 1976 (prior to the inception of Strathcona Transit) posed a question pertaining to the greatest perceived disadvantage of living in Sherwood Park. From 491 respondents the most mentioned disadvantage (23 per cent) was poor bus service.[1]

The Burton survey conducted three years later asked respondents their rating and use of public transit services to Edmonton and locally. The response pattern is summarized below showing percentage averages for the Sherwood Park EDs and the rural EDs.[1]

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[1] The next two most cited disadvantages were inadequate shopping facilities (12 per cent) and no hospital (11 per cent).

	Local Service		Service to Edmonton	
	Sherwood Park EDs	Rural EDs	Sherwood Park EDs	Rural EDs
Rating:				
Good	37.7	11.0	44.4	11.5
Average	24.6	5.6	22.7	7.6
Bad	9.6	17.3	8.5	19.7
No Response	28.1	66.1	24.3	61.3
Use Level	44.7	7.2	54.8	12.0

The residents of rural EDs show a very high no response rate and a low level of usage. Those that did respond were more likely to rate the service as 'bad' rather than 'good.' However, the most positively impressed rural residents were those most likely to use the service (in ED 2 just south of Sherwood Park).

Since the transit service is primarily intended for Sherwood Park residents, their responses are of more relevance. Almost two-thirds of them rated the services as either 'good' or 'average' with a marginally higher rating for the service to Edmonton. The use level shows that the service to Edmonton is somewhat more important than the local service.

When it is considered that poor bus service was the most cited disadvantage to residing in Sherwood Park in 1976 while in 1979 two-thirds rated the transit service as good or average, it is reasonable to conclude that the service introduced in 1979 had eliminated much of the dissatisfaction.

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[1] See Appendix Tables III-3 page A-56 and III-6 page A-63.

The Burton survey was conducted prior to the major effort to improve the service in 1979 to counteract the decreasing trend in ridership. Those improvements achieved their objective and it is probable that if the survey were done later in 1979 even higher levels of satisfaction would have been registered.

The 1982 strike and regular fare increases may constitute offsetting factors. The 25 per cent decline in ridership between 1981 and 1982 strengthens this impression. Scope for service improvement is recognized to minimize missed transfer connections, to increase the frequency on some routes and to provide better service in certain areas of Sherwood Park.

Service Efficiency and Effectiveness Comparisons

Strathcona Transit is essentially a corridor-type service between Edmonton and Sherwood Park. Only about 20 per cent of the annual rides stay within the hamlet. This makes the service quite unlike most other urban transit systems in the province.

The only reasonably comparable system to Strathcona's is that of St. Albert. It provides a similar kind of corridor and internal service, the population served is very similar to Sherwood Park and it operates on a contract with Edmonton Transit. But unlike Strathcona it does not incorporate any special provisions for servicing the adjacent rural area. As well, St. Albert has a greater frequency of buses and more routes (10 as compared to six). As a result the St. Albert system has a greater number of operating hours. In 1981 it logged 45,531 hours compared to Strathcona's 31,888.5 hours.

Table 62 provides some measures of comparison among the Red Deer, St. Albert and Strathcona transit systems. Major differences are apparent between the Red Deer service and the corridor-type services of St. Albert and Strathcona.

The per capita gross and net expenditure in Red Deer is noticeably lower. This is primarily attributable to the fact that Red Deer is a larger centre providing a within-city service. The costs of operation in St. Albert and Strathcona are higher due to the distance travelled between passenger pick-up and drop-off along the routes to the City of Edmonton. Also, note that the annual rides per capita in Red Deer are about twice as high as those in St. Albert and Strathcona.

The per capita revenue generated is very similar in all three urban centres but due to its lower cost of operation the system in Red Deer generates enough revenue to cover 70 per cent of the cost while the revenue from the St. Albert and Strathcona systems covers around 55 per cent of the cost.

In comparing the systems of St. Albert and Strathcona the striking feature is the similarity of figures for all of the indicators listed in Table 62. However, the net cost per capita and per $1000 EA is somewhat higher for Sherwood Park.

In regard to costs to transit users the fares for trips to Edmonton are the same for both systems ($1.35). However, Strathcona's present fare was set in mid-1982 while that for St. Albert was set in April 1983. The internal trip fare in St. Albert is presently $0.55

TABLE 62

Public Transit Service Indicators, Selected Municipalities and Strathcona County, 1981 data

	Red Deer	St. Albert	Strathcona*
Gross Expenditure			
- dollars per capita	$39.60	$49.80	$50.10
Operating Revenues			
- dollars per capita	$27.70	$29.10	$27.70
- per cent of Gross	69.9%	58.4%	55.2%
Net Expenditure			
- dollars per capita	$11.90	$20.70	$22.40
- dollars per $1000 EA	2.1	3.7	4.2+
Annual Rides per capita	41	21.5	20
Rides per hr. of operation	n.a.	14.7	17.8

* all calculations based on Sherwood Park data only.
+ 1.3 if assessment of whole county included.

Source: Financial Statements and Public Transit Needs Study by GCG Engineering 1982.

while that for Sherwood Park is $0.65.[1]

The St. Albert service generates a slightly higher level of usage than that of Strathcona in terms of rides per capita, but due to its longer hours of operation the St. Albert service generates less rides per hour than Strathcona.

Given that the St. Albert service in comparison with Sherwood Park's provides more routes and greater bus frequency, charges slightly lower fares or increases its fares later, and has a somewhat lower net operating expenditure per capita and per $1000 EA, the service level for Sherwood Park is rated below average.

However, it should be kept in mind that the Strathcona service includes a deliberate effort to provide a service to the rural population adjacent to Sherwood Park, especially through the park-and-ride facility. It is currently estimated that 8 per cent of the system's ridership are persons residing outside the hamlet. Considering that no other rural municipality provides a general public transit service, the Strathcona service must be considered above average for rural residents, at least for those close enough to Sherwood Park to make use of the service feasible.

The public opinion data reviewed earlier indicated a fair degree of satisfaction with the service in 1979. With improvements made in the service later that year it is probable that present levels of satisfaction are even higher now, especially if the annual rate of increase in rides per capita since 1979 (around 25 per cent) is used as an indicator.

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[1] A review of fares in recent years indicates that fare increases in St. Albert often lagged behind those in Sherwood Park. For example the adult corridor fare in Sherwood Park rose to $1.25 from $1.00 in mid 1981. The same fare in St. Albert remained at $1.00 until May 1982.

The normal comparisons made for other services in terms of cost-efficiency and effectiveness are not possible with public transit. Much has had to be made of comparisons with St. Albert since it is the only centre with a similar transit system as Strathcona. As well it is necessary to distinguish the cost to the user of the service through fares from the cost to taxpayers through general taxation.

Table 63 provides a summary of the service evaluation. Note that only an evaluation for Sherwood Park is presented. The rural area evaluation is discussed later on.

Notice the difference in the cost, efficiency and effectiveness ratings for users and taxpayers. The cost to users is rated above average due to transit fares being higher than those in St. Albert up to the spring of 1983. That, combined with the below average service level due to less routes and buses than St. Albert, results in low and below average ratings for efficiency and effectiveness.

The cost to taxpayers is rated very low due to the fact that the net cost for the transit service is covered by general taxation throughout the entire county. The cost per $1000 EA is only $1.30 when the assessment of the whole county is considered. That is about one-third the fiscal effort required in St. Albert. The result is high ratings for efficiency and effectiveness for taxpayers.

The rural area evaluation is complicated because the transit service is used by few rural residents and only by those in close proximity to Sherwood Park. Yet all rural residents pay for the transit service through taxation. The result is a distinct benefit/cost

TABLE 63

Public Transit Service Evaluation

	Sherwood Park
Level	Below Average
Cost	
- users	Above Average
- taxpayers	Very Low
Satisfaction	Average
Efficiency	
- users	Low
- taxpayers	High
Effectiveness	
- users	Below Average
- taxpayers	High

Note: Possible ratings are
Very High
High
Above Average
Average
Below Average
Low
Very Low

imbalance especially for rural residents for whom use of the transit service is impractical.[1]

Potential Service Improvements

It is recognized by the county administration that there is scope for public transit service improvements. The challenge is to improve the service while increasing the ridership sufficiently so that increases in fares and in the tax-supported net cost of the service are minimized. Red Deer Transit is different from Strathcona in that it is an internal transportation system but the percentage of cost covered by revenues in Red Deer (70 per cent in 1981) indicates a desirable direction in which to move. A reduction of the tax-supported cost of the service is especially important in Strathcona since the service is primarily one of benefit to urban residents yet it is a tax cost for all county residents.

From Table 61 page 170 it can be noted that approximately 80 per cent of the operating expenditures are due to the Edmonton Transit contract and school bus leasing. Therefore, under the existing arrangements there is little flexibility for a reduction of costs.

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[1] Education services are not analysed in this report. However, in terms of public transportation the benefit/cost imbalance in regard to Strathcona Transit is offset for rural residents by school bus transportation. The net cost of that service is paid by all county residents through the school supplementary tax but the net cost attributable to transporting rural area students in 1981 is calculated at $613,000 while that due to transporting Sherwood Park students is only $80,000.

The Public Transit Needs Study (GCG Engineering 1981) suggested that the county examine the feasibility of operating its own system or contracting the service out to a private operator. It was suggested that the hourly rate for operation was considerably higher than that experienced in smaller cities (see Red Deer costs, Table 62 page 175 for example) and that it should be possible to make some reductions. The study also pointed out that since the buses are garaged in Edmonton there is an empty haul at the start and the end of each day which contributes to operating time and cost.

In 1982 the county initiated a first phase of a major study to examine the feasibility of replacing the present Edmonton Transit contract with a county-owned and operated system.[1]

If the county operated its own system it would need to provide all services including drivers, training, maintenance, garage facilities, etc. Yet the preliminary study findings indicate that the entire system could be operated for $2.88 per hour less than the present contract price and that the savings would increase in future years. On an annual basis the cost reductions would be $130,000 in 1983 and $280,000 in 1991. The savings could be greater if inflation rates increase or if an economic decline induces major service cutbacks and contract cost increases by Edmonton Transit.

The study cautions that other factors must be considered. For example, provincial grants may influence net costs or there may be potential savings by integration of Strathcona Transit with other county functions. Another item to consider is the relationship with Edmonton Transit such as use of bus stops in Edmonton and transfer privileges for Strathcona Transit users.

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[1] Prepared by Stanley Associates Engineering Ltd. The second phase of the study is now being planned. It will update data and investigate the costs of garaging an independent system in Sherwood Park.

The evaluation of public transit in this report indicates that there is some potential for service improvements. Whether these improvements can be enacted best by establishing an independent system or by continuing the Edmonton Transit contract is a decision which is not likely to be made until the current studies by Stanley Associates are completed and reviewed. The benefits of an independent system, in terms of potential cost savings and more flexibility in scheduling and routes, must be balanced against the initial capital costs required for garaging and the necessary expansion in the numbers of county employees. Another consideration is the difficulties which may arise if there is a proliferation of independent transit systems in the Edmonton Metropolitan area.

J. GARBAGE COLLECTION AND DISPOSAL

This service category involves two main components: the collection service and the disposal service.

The residential collection service in Strathcona County is undertaken by private operators under contract to and paid by the county. The disposal service involves a combination of private contracting, inter-municipal agreements and county operated facilities.

Commercial, institutional and industrial property-owners are responsible for arranging, at their own expense, a collection service with private contractors. The county itself makes such arrangements for its own buildings including the administration building, public works shops, firehalls, schools and recreation complexes.

The expenses incurred by the county for garbage collection and disposal for its own properties are included under the building maintenance component of general government services. Therefore the expenditures examined in this service section pertain to the residential collection contracts and costs borne by the county for disposal site use.

Garbage Collection Service

The county pays a private contractor (Laidlaw) to provide a weekly residential garbage collection service in Sherwood Park. Virtually all residences in the hamlet receive the service except apartment and multi-family units for which the building owners arrange their own private collection agreements.

Laidlaw also serves 78 designated country-residential subdivisions and small hamlets, comprising about 2500 residences, in the southern half of the county. The service is weekly, on a five day rotational cycle.

In the northern half of the county a private operator (Weizenbach) is paid by the county to serve the hamlet of Josephburg and the country-residential subdivisions of Pointe-aux-Pins and Galloway Park. About 100 residences receive this weekly service.

The county policy for the rural garbage collection is that farms and scattered small-holdings in excess of 10 acres are not provided with the service. Small hamlets are served as are country-residential subdivisions if:

- subdivision parcels have access to an internal road,
- the subdivision is at least 60 per cent occupied,
- lots in the subdivision are less than 10 acres, and
- residents have petitioned the county council.

Presently, 80 subdivisions comprising about 2600 residences receive a collection service. There are about 4470 non-farm residences in the rural area of the county, so approximately 60 per cent of them are served.[1]

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[1] County staff estimates are that there are another 28 subdivisions comprising 361 residences which are eligible to receive the service but have not petitioned the council. Another 546 residences are located in currently ineligible subdivisions although 90 of these are in subdivisions with 55 to 59 per cent occupancy.

Garbage Disposal Service

Garbage collected by Laidlaw from Sherwood Park and rural residences is hauled to the City of Edmonton's Clover Bar landfill site where it is disposed of at the county's expense. Estimates are that 16,000 tonnes of county refuse per year are hauled to Clover Bar.[1] Garbage collected by Weizenbach in the Josephburg area (about 150 tonnes per year) is taken to the Ardrossan site which is operated by the county. Contractors serving commercial, institutional and industrial establishments haul to the landfill of their choice.

County residents without a garbage collection service have several disposal options:

- on site burning or burial (practised by many farmers);
- use of the Josephburg transfer station at no charge for ultimate disposal at county expense at Clover Bar;
- use of the Ardrossan landfill site at no charge; and
- use of the Looma landfill in the County of Leduc at no charge (but Strathcona makes payments to Leduc County).

The last option has benefitted residents in the south-west portion of the county but annexation has reduced the number likely to make use of the facility.

Strathcona County operates two disposal facilities. The Ardrossan landfill is a 160 acre site about four miles east of Ardrossan. Apart from the 30 to 40 acres currently set aside for solid waste disposal the site also contains lagoons for septic tank pumpouts. Although legally only a modified landfill the Ardrossan site is now effectively operated as a sanitary landfill, involving frequent compacting and covering as well as on-site attendants.

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[1] The landfill site is in the area recently annexed by the City of Edmonton.

Access to the Ardrossan landfill is available without charge to any resident of the County. Since no records have been kept it is estimated that the main potential service area lies within a radius of about five miles with a population of around 3300. Most of the residents are in estate subdivisions, many of which receive the county's collection service from Laidlaw. Their garbage is disposed of at Clover Bar thus limiting local demands on the Ardrossan site. The site is used to a modest extent by other county residents such as those in Sherwood Park for the disposal of dry, bulky items. It is also used for the disposal of some of the non-residential wastes generated in the county. Very crude estimates of the total volumes handled at Ardrossan have ranged from 1,400 to 1,800 tonnes per annum.

The County also owns and operates the Josephburg transfer station located in an agricultural area approximately two miles north of the Hamlet of Josephburg. In 1979 the local Health Unit authorized the use of five acres of the site as a refuse transfer station (it opened in August 1980) and three acres as a modified landfill for the disposal of dry material. Initially the conditions for the operation of the site included the use of an on-site attendant but since October 1982 the transfer station has been operated without one and the dry disposal site has been closed. The county has a contract with Tricil Limited to supply container bins and to empty their contents periodically for disposal at Clover Bar.

Access to the Josephburg transfer station is available without charge to any county resident but, as with the Ardrossan landfill, it is only lightly used. The facility is estimated to have handled only 195 tonnes in 1981, its first full year of operation. The potential service area, basically ED5, is sparsely populated with about 2200 residents. Some of them receive the Weizenbach collection service and their trash is hauled to Ardrossan. Much of the potential service area is agricultural so it is likely that the bulk of the garbage generated is disposed of by on-site burning or burial.

Based on the average number of residents annually served by Laidlaw from 1979 to 1982 and the average tonnes annually disposed of at the Clover Bar landfill station excluding the minor amount transferred from the Josephburg station, a residential garbage generation rate is calculated of 0.46 tonnes per capita per annum. This rate is considerably higher than that for Edmonton (0.32) and St. Albert (0.28).[1]

It is expected that the high Strathcona rate is due primarily to garbage generated by country-residential subdivision dwellers - such as brush, lawn clippings, trees, construction materials, animal wastes - and to the generally unrestrictive collection policy of Laidlaw.

Applying the garbage generation rate of 0.46 to the 1982 county population of 47,949 results in an estimate of 22,000 tonnes of residential waste being generated. Most of this, around 15,000 tonnes, is disposed of at the Clover Bar landfill and about another 1500 is disposed of at the Ardrossan landfill. The tonnage taken to the Looma site may be less than 500 annually and the amount handled at Josephburg is included in the Clover Bar estimate. Therefore, it is estimated that approximately one-quarter of the garbage generated by county residents is disposed of on-site by burning or burial.

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[1] See Tables 64 and 66 pages 188 and 191 for source.

Financial Analysis

Strathcona county expenditures on the garbage collection/disposal service have been around $670,000 in recent years. No revenues are generated because there are no user charges levied. The expenditure on each component of the service is examined below.

Garbage Collection Costs

Laidlaw Service: The major cost item for the service is the agreement between the county and Laidlaw for collection and haulage services to the residents of Sherwood Park and the designated rural subdivisions in the southern half of the county.[1]

The county and Laidlaw have recently agreed upon a new contract which has different charges for the urban and rural residences. Those in Sherwood Park are to cost the county $2.75 per month per unit while the rural residences are to cost $4.99 per month per unit. Those charges include the costs of haulage to the Clover Bar landfill but they do not include the disposal costs charged by Edmonton.

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[1] Note that the annexation decision affected five serviced rural subdivisions with 133 residences. The county continued to service them until the end of 1982 and charged the City of Edmonton for the costs involved.

TABLE 64

Garbage Collection Costs: Laidlaw Service to Sherwood Park and Rural Residential Subdivisions, 1979 to 1983

	Total Charges to Contractor	No. of Houses Served (Average)	Average Cost per House Served per Month	Number of People Served	Cost/ per capita
1979	$ 271,542.50	8,585	$ 2.64	29,189	$ 9.30
1980	$ 358,540.67	9,585	$ 3.12	32,589	$ 11.00
1981	$ 470,663.43	10,190	$ 3.85	34,646	$ 13.58
1982	$ 491,051.58	10,500 (est.)	$ 3.90	35,700	$ 13.75
1983 (projected)	$ 430,000.00	10,800 (est.)	$ 3.31	36,720	$ 11.71

Source: "County of Strathcona No. 20: Solid Waste Management Study," Issues Paper, Stanley Associates, April 1982 p. 3.6; and estimates derived in consultation with County staff.

Prior to the new arrangement a simple letter-agreement (rather than a formal contract) set out the aggregate monthly charges for the collection service. These were $24,870 in 1981 and $27,098 in 1982. In addition as new units were served a set of fixed monthly charges applied ranging from $3.00 for condominiums in Sherwood Park to $7.50 for residences more than ten miles from Sherwood Park. The former arrangements also included an annual escalator clause which appears to have worked to the county's detriment. From 1979-81 collection costs to the county rose by 73 per cent but the average number of residential units served rose by only 19 per cent.

Table 64 presents the costs incurred by the county for the Laidlaw service. Due to the new contract, the rising trend to 1982 is expected to be reversed in 1983.

Weizenbach Service: The costs for the collection service to the 100 or so residences in the Josephburg area are presented in Table 65. The service is provided under a simple letter-agreement which has been in effect for over ten years. Presently, the county pays Weizenbach a flat rate of $120 per week.

TABLE 65

Garbage Collection Costs: Weizenbach Service to Josephburg and area, 1979-1983

Year	Total Annual Collection Costs	Notes
1979	$ 4140	Pointe-aux-Pins subdivision added.
1980	$ 5750	Haul to Ardrossan instituted.
1981	$ 6240	
1982	$ 6360	
1983 (projected)	$ 6240	Flat rate of $120 per week.

Source: Stanley Associates Study (April 1982), p. 4.1; and discussions with County staff.

Garbage Disposal Costs

Clover Bar Landfill: The garbage collected by Laidlaw and that transferred from the Josephburg station is disposed of at the City of Edmonton's Clover Bar landfill under a 1971 agreement between the city and the county. The county granted approval for the city to acquire the lands (then within the county) for use as a sanitary landfill subject to certain terms and conditions including county use of the facility.

The agreement indicated that the county could use the site "at a price to the county which is equivalent to the cost which the city incurs as a result of the use of the sanitary landfill site by the county." The city initially established a charge to Strathcona of $1.83 per ton in 1973. However, in 1974 the city retroactively reduced that to $1.23 per ton ($1.35 per tonne). This charge remained in effect until 1983 when the city set a new and more realistic charge of $5.00 per tonne.

The previous highly favourable rate may be considered to partly reflect the fact that the county was effectively maintaining the access roads to the site thereby relieving Edmonton of some costs. After annexation however, the city became directly responsible for all aspects of the site operation and the county ceased to have any jurisdiction in the area. It should be noted that the existing Clover Bar site is planned for closure in 1985 and presently it is not certain that other municipalities will be permitted to use the planned (adjacent) replacement site.

The volumes disposed of at Clover Bar, and the costs incurred by the county since 1979, are presented in Table 66. It is apparent that if Strathcona continues to use the site as it has in the past then costs in 1983 and beyond will rise sharply.

TABLE 66

Clover Bar Landfill: Disposal Costs and Volumes Relating to Strathcona County, 1979-83

	Disposal Costs	Tonnes Disposed
1979	$ 21,448	16,000
1980	$ 24,000	17,800
1981	$ 19,650	14,610
1982	$ 17,022	12,600
1983 (proj.)	$ 75,000	15,000

Source: Stanley Study (April 1982), p. 6.3; and consultations with County staff.

Ardrossan Landfill: The estimate of the total tonnage disposed of at Ardrossan is no more than 2000 tonnes per annum. That includes garbage collected by Weizenbach as well as that hauled by other private contractors serving non-residential establishments and that dumped by county residents on their own.

The costs of operating the Ardrossan landfill are presented in Table 67. The 1982 data are based on trial balance estimates and incorporate numerous assumptions which may not be valid. The labour estimate may be high since the engineering overhead which it incorporates includes administrative servicing of the collection, as well as the disposal, function. If it is assumed that approximately 2000 tonnes were disposed at Ardrossan in 1982 the operating cost per tonne works

TABLE 67

Ardrossan Landfill Operating Costs, 1979-1982

	1979	1980	1981	1982
Labour	$ 42,915	$ 62,740	$ 64,360	$ 84,478
Public Works Equipment Repairs	44,070	-	-	-
Miscellaneous	3,060	2,010	-	5,259
Internal Equipment Repair and Maintenance	-	930	450	-
Internal Vehicle and Equipment	-	20,000	26,280	30,000
TOTAL:	$ 90,045	$ 85,560	$ 91,360	$ 119,737

Sources: The 1979-81 data is taken from The Stanley Associates Study (April 1982) p. 6.5.

The 1982 data have been estimated from the trial balance figures. Labour costs for Ardrossan were estimated as 80% of the total bill (the balance being incurred at Josephburg); Miscellaneous items were derived by halving this category as a whole (on the presumption that collection and disposal functions attract equal miscellaneous costs), and 80% of this figure was attributed to the Ardrossan operation (the balance figure being charged against the Josephburg transfer station operations). The Internal Vehicles item is an estimate of the cost of services provided by the Public Works Department for periodic compacting and covering at the site.

out to around $60 (cf. $50 for 1981). This cost level is very high in comparison with other landfill costs in the Edmonton area, and especially in comparison with the $5 per tonne rate incurred by the county for the use of the Clover Bar site (this option may not be available to the County after 1985 however). Other comparative data presented in the Stanley Associates study indicate that regional waste management systems have disposal costs per tonne (including transportation costs) of around $20 at present. Thus the Ardrossan costs are high even if the volume estimates are off by a factor of two.

Josephburg Transfer Station/Dry Disposal Site: The transfer station has been in operation since August 1980 at which time the adjacent landfill site was designated for the disposal of dry wastes only. The county was required to provide an attendant at the combined site until October 1982, when the Health Unit agreed to relax this condition, in part because of the county's closure of the adjacent dry disposal site. The transfer station is serviced on a contract basis by Tricil, which provides containers and hauls the wastes to Clover Bar. The county is charged a monthly rental for two containers and for periodic lift service. The contract contains an inflation clause and is due to terminate in 1985. The county is also billed by Edmonton for landfill costs incurred.

The costs of operating the Josephburg facility are indicated below.

TABLE 68

Josephburg Transfer Station:
Operating Costs 1981 and 1982

	1981	1982
Labour	$ 21,540	$ 21,119 (est.)
Tricil Contract	$ 5,347	$ 6,705
Disposal charges at Clover Bar	$ 350	$ 350 (est.)
Miscellaneous	$ 2,180	$ 1,315 (est.)
Outside Labour: Equipment Repairs	$ 5,065	$ 5,000 (est.)
	$ 34,482	$ 34,489

Sources: Stanley Associates Study (April 1982), p. 5.3; and estimates based on allocation of 1982 trial balance costs between Josephburg and Ardrossan (see notes at foot of Table 67).

Using data for 1981, when the station is estimated to have handled approximately 195 tonnes, the operating cost per tonne was $177. This is an exceptionally high operating cost per tonne when compared with other transfer station operations in Alberta. A more normal level would have been in the range of $10-$20 per tonne. It is clear that considerably larger volumes of refuse must be handled by the transfer station to achieve significant economies of scale in operation.

Presuming the current situation (relieving the County of the need to permanently man the station) lasts for all of 1983 it can be anticipated that the operating costs for the facility will fall significantly. Even so, unless there is a considerable increase in the volume of wastes handled the operating costs per tonne will continue to be much higher than other such stations, casting serious doubt on its economic viability in the longer term. Much of the expense incurred supports in effect a double servicing of certain area residents who have regular garbage collection and the option to use the station as a back-up.

Looma Dump (County of Leduc): The County of Strathcona has had an arrangement for several years with the County of Leduc whereby Strathcona residents may dispose of their residential wastes at the Looma landfill. The refuse is weighed and Strathcona is billed accordingly.

From an annual cost of approximately $2,800 to $3,000 a few years ago the cost to Strathcona rose to $7,563 in 1982. As a result of the annexation-related apportionment of a large part of the County of Strathcona to the County of Leduc it is likely that the current use of the Looma site by Strathcona residents is much lower than in previous years.

Combined Collection and Disposal Costs

Table 69 presents a summary of the total service costs from 1981 to 1983. The 1983 data are estimates derived from the county's budget. Note that the majority of costs are due to the collection component of the service. No specific user charges are levied by the county so the total costs are paid through general municipal taxation.[1]

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[1] With the exception of about $10,000 received by Strathcona in 1982 from Edmonton for the county's continued collection service to five country-residential subdivisions in the annexed area. This service was discontinued at the end of 1982.

TABLE 69

Garbage Collection and Disposal Expenditures
Strathcona County, 1981 to 1983

	in dollars		
	1981	1982	1983
Laidlaw Contract	470,663	491,052	434,044
Weizenbach Contract	6,240	6,360	6,740
Clover Bar Landfill	19,650	17,022	83,750
Ardrossan Landfill	91,360	119,737	113,381
Josephburg Site	34,482	34,489	21,110
Looma Landfill	4,600	7,563	5,500
TOTAL	626,995	676,223	664,525

Note: Contract Collection costs as per cent of total are:

1981 - 76%
1982 - 74%
1983 - 66%

Source: see Tables 64 to 68.
1983 data from budget estimates with arbitrary allocation of administrative overhead to the various functions.

Urban/Rural Cost Breakdown

Table 70 presents a breakdown of the 1983 budgeted expenditure into amounts for Sherwood Park and the rest of the county. The percentage of the total attributable to urban and rural areas is within 5 per cent of the actual population distribution.

Per capita costs for the total service are slightly higher in the rural areas while those for Sherwood Park are slightly below the county aggregate. Collection costs are of prime significance for Sherwood Park and the county as a whole with disposal costs comprising a greater proportion of total costs in the context of Rural Strathcona. In 1983 the main effect of the more favourable collection contract terms will tend to boost the significance of disposal costs.

While virtually all of the Sherwood Park residents benefit from the total service only about half of the residences in Rural Strathcona are serviced. If only that population had been used (estimated at around 9,000 in 1982/83) the rural service per capita costs would double. In practice however, many of the rural residents not receiving a collection service are able to avail themselves of the disposal facilities.

Public Opinions

The 1979 Burton survey did not include a question on the level of use of garbage collection and disposal services but the use level can be inferred from the level of non-response to the question on the rating of the service as the percentage response rates presented below

TABLE 70

Estimated Urban/Rural Breakdown of Garbage Collection and Disposal Expenditures, Strathcona County 1983 budget

	1983 Estimates		
	dollars per capita	per cent of Subtotals	percent of TOTAL
Sherwood Park			
- Collection	9.26	72.8	41.5
- Disposal	2.26	17.8	10.1
- Admin. Overhead	1.19	9.4	5.4
- Sub-Total	12.71	100.0	57.0
Rural Areas			
- Collection	8.76	55.7	24.0
- Disposal	5.98	38.0	16.4
- Admin. Overhead	0.99	6.3	2.7
- Sub-Total	15.73	100.0	43.0
TOTAL COUNTY	13.86	n.a.	100.0

Note: may not add exactly to totals due to rounding.

* Nov. 1982 population estimates used.

Source: Derived from UAG staff calculations applied to 1983 budget estimates of the county. Total budgeted expenditure is same as that shown in Table 69.

- Collection costs were calculated on the basis of the current number of urban and rural residences serviced by Laidlaw and use of the differential billing rates.
- Disposal costs for Clover Bar were estimated using a garbage generation value of 1.5 tonnes per annum; based upon the average tonnage disposed at Clover Bar divided by total number of residences served by Laidlaw.
- Administrative overhead based on 1983 budget split in proportion to rural/urban population.
- Arbitrary allocation of 10 per cent of Ardrossan landfill costs to Sherwood Park.

illustrate. (See Appendix Table III-3 page A-54 and III-6 page A-61.)

	Urban	Estate	Rural
Service Rating			
Good	76.9	28.5	5.9
Average	17.9	11.9	10.3
Bad	3.6	16.8	8.1
No Response	1.7	42.8	75.0

The high rates of no response from the traditional rural population is not too surprising since they do not receive the service. The rate of no response from the estate (country-residential) residents more or less conforms to the percentage of that population which do not receive the service.

The highest non-response rate occurred in electoral division (ED) 5, the most northerly district with the highest proportion of farming population and the lowest level of collection service. Of the other rural EDs the highest 'good' ratings come from ED 2 just south of Sherwood Park and served by Laidlaw and from ED 1 (now lost to annexation) where the bulk of the population lived in a mobile home park which received privately arranged, rather than county-sponsored, collection services.

ED 4 residents registered the highest 'bad' ratings. The Ardrossan landfill is located in this district and it is possible that some acreage residents in its vicinity have concerns about the disposal provisions. It is also possible that the dissatisfaction pertains to the collection service. At the time the survey was taken some acreage subdivisions may not have been eligible, under the county's policy, to receive the service. Also, at present there are a number of subdivisions which are eligible for the service but for some unknown reason their residents have not petitioned the county council to receive it.

In regard to the urban (Sherwood Park) residents it is clear that the vast majority are highly satisfied with the service they receive.

Service Efficiency and Effectiveness Comparisons

Table 71 summarizes the type of garbage collection and disposal service provided in the comparison municipalities and Strathcona County. Three main features are noteworthy.

First, only two of the eight urban municipalities operate their own collection service. The rest, including Strathcona County in respect to Sherwood Park, use contracted services. Also most of the urban collection services apply to residential properties only. Businesses are expected to make their own arrangements.

Second, none of the comparison rural municipalities provide any sort of collection service. This is in sharp contrast to rural Strathcona where country-residential subdivisions are served, providing they meet the county criteria (see page 183).[1]

Thirdly, most of the municipalities finance the service through general taxation. Red Deer and Spruce Grove are the only two which employ user charges. Revenues in some other municipalities are generated from inter-municipal agreements.

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[1] Residents in other rural municipalities may be able to obtain a commercially-provided collection service. In Parkland County, for example, such a service costs the resident at least $10 to $12 per month.

TABLE 71

Garbage Collection/Disposal: Comparison Municipalities - Service Background

Municipality (1982 Population)	Collection	Disposal	Financing
County of Strathcona Sherwood Park (29,764)	Contracted out; residential service only; once per week	At City of Edmonton Clover Bar site, for a charge of $5 per tonne	General taxation
Rural Area (18,185)	Contracted; to 80 designated rural subdivisions (involving 50% of the rural residences in the County); once per week	Most of the collected refuse is disposed at Clover Bar; some is taken to the County's own landfill at Ardrossan. A transfer station is provided at Josephburg, as well as disposal facilities at the County of Leduc's Looma site	General taxation
County of Leduc (13,258)	Nil (except for pick-up from transfer stations at Nisku and Pigeon Lake)	Participation in the Leduc Regional landfill; plus operation of several small landfill sites throughout the County	General taxation and some small contributions from other municipalities
County of Parkland (23,626)	Nil	Owns several disposal sites throughout County, and contracts out maintenance work; Arrangements for use, by county residents, of the Stony Plain and Drayton Valley landfills (involves some cost-sharing)	Revenues from other municipalities
M.D. of Foothills (8,725)	Nil	Participation in Foothills Regional landfill; Owns several disposal sites throughout M.D.	General taxation
M.D. of Rocky View (17,362)	Nil	Operates several transfer stations and disposal sites throughout the M.D.; plus arrangements with other municipalities (cost-sharing)	General taxation and contributions from other municipalities
M.D. of Sturgeon (13,682)	Nil	Participation in Sturgeon Regional Landfill	General taxation
City of Fort McMurray (33,576)	Own crew; now residential service only, once per week	Operates own landfill	General taxation
City of Grande Prairie (24,263)	Contracted out; residential service only; once per week (twice weekly for apartments)	Operates own landfill	General taxation
City of Red Deer (48,562)	Contracted out; residential service once per week; business service at variable frequency	City-owned landfill; operation contracted out; some usage by other municipalities	User charges ($3.83 per month per residence) variable charges for businesses
City of St. Albert (32,982)	Own crew; now residential service only; once per week	Dry refuse disposed at City's own site; all other refuse disposed at Genstar-operated site (costing City $4.75 per tonne)	General taxation
Town of Airdrie (9,981)	Contracted out; residential service only; once per week	Contracted out (own landfill available as back-up)	General taxation
Town of Fort Saskatchewan (12,455)	Contracted out; residential service once per week; businesses, twice per week basic	City of Edmonton Clover Bar site; plus town operated transfer station	General taxation
Town of Leduc (12,471)	Contracted out; four pickups per month for residences; contractor rents bins to businesses - town covers one bin pickup per business per week	Leduc Regional landfill (1983 operating costs per tonne, $4.60)	General taxation
Town of Spruce Grove (10,784)	Contracted out; now residential only; twice per week	Contracted out; previous own dump within town; now Genstar site near St. Albert; transfer station back-up	User charges ($6.03 per month per residence)

Sources: Communication with municipal officials.

Table 72 shows the expenditure and revenue indicators for the operation of the garbage collection and disposal services. The Sherwood Park/rural breakdown for Strathcona County is an estimate only. The usual 4C and 5RM averages are not shown because of the distortion which would result due to the relatively high expenditures of Red Deer and Leduc County.

In comparison with the towns and cities the per capita level of expenditure for Sherwood Park appears about average. Red Deer has a considerably higher expenditure because it includes services to businesses as well as expenses for the billing of users. St. Albert's expenses are considerably lower than the other urbans. That may be due to the fact that St. Albert operates its own collection service and some expenses, such as administration and vehicle maintenance, could be reported under other municipal service categories.

Note that Spruce Grove and Red Deer experience an almost negligible net expenditure due to the revenues generated from user charges. Sherwood Park's net expenditure per $1000 EA appears about average for an urban centre that does not levy user charges, especially in comparison with Leduc, Fort McMurray and Grande Prairie. However, the fiscal effort actually required in Sherwood Park is that indicated for the entire county which is lower than most of the urban centres.

Rural Strathcona in comparison with the five rural municipalities shows a very high expenditure level. That is expected since the comparison rurals do not provide a rural collection service. However, even if collection expenses are ignored for Strathcona the

TABLE 72

Garbage Collection and Disposal Expenditure and Revenue Data, Comparison Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

	dollars per capita			dollars per $1000 EA
	Gross Operating Expenditure	Operating Revenues	Net Expenditure	Net Expenditure
Airdrie	13.7	nil	13.7	3.2
Fort Sask.	16.1	nil	16.1	1.2
Leduc	12.3	nil	12.3	2.2
Spruce Grove	15.9	15.6	0.3	0.05
Fort McMurray	14.8	0.7	14.1	2.6
Grande Prairie	14.2	nil	14.2	2.2
Red Deer	31.0	30.8	0.2	0.04
St. Albert	8.4	0.3	8.1	1.5
County of Leduc	8.0	0.5	7.5	0.7
County of Parkland	1.3	1.5	(0.2)	nil
MD of Foothills	1.8	nil	1.8	0.2
MD of Rockyview	1.9	1.3	0.6	0.05
MD of Sturgeon	1.3	nil	1.3	0.15
Sherwood Park				
*1981	13.4	nil	13.4	2.5
*1982	12.8	nil	12.8	2.3
Rural Strathcona				
*1981	13.6	nil	13.6	0.8
*1982	15.8	0.6+	15.2	0.85
Strathcona County				
1981	13.5	nil	13.5	1.4
1982	13.9	0.2+	13.7	1.3

* breakdown estimated by applying sub-total percentages from Table 70 to 1981 data.

+ one time only payment from City of Edmonton. See footnote page 195.

Note: see footnote page 62 for explanation of revenue and expenditure data.

Source: Financial Statements.
Population and Assessment calculations based on Appendix II tables.

per capita cost of the rural disposal service is estimated at in excess of $5.00 per capita.[1]

With the exception of Leduc County which participates in a highly-rated regional sanitary landfill system, the per capita cost of the disposal service in the comparison rurals is well below the $5.00 estimated for Strathcona. It is believed that Strathcona is incurring abnormally high rural disposal expenditures because of the poor operating economies of the Ardrossan and Josephburg facilities and because of the dual service available to a substantial number of rural residents; that is, those receiving a collection service and who also have ready access to disposal facilities.

The fiscal effort required for the garbage collection and disposal service in rural Strathcona is noticeably higher than the other rurals except Leduc. It is in fact even higher since the net expenditure per $1000 EA is that which applies to the entire county.

Urban Service Evaluation

The garbage collection and disposal service for Sherwood Park is very much like that of comparable urban municipalities - a contracted once-a-week collection system with disposal at a regional landfill site. As well, Sherwood Park residents can utilize the disposal facilities at Ardrossan or Looma if they wish to.

The service cost to Sherwood Park residents, however, is below average. That is because the service expenditures are covered by general taxation upon all property in the county resulting in a noticeably lower fiscal effort than other urban centres which can generate taxes only from the property within their corporate boundaries. The absence of user charges is not unusual. The service cost for Sherwood Park residents would be even lower if the service provided in rural areas of the county was similar to that of other rural areas.

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[1] Based on an estimation of disposal costs as 38 per cent of the rural service expense. See Table 70 page 198.

The service satisfaction, based upon the results from the 1979 Burton survey, is quite high with 95 per cent of respondents rating the service as either 'average' or 'good.'

These factors lead to cost-efficiency and cost-effectiveness ratings for Sherwood Park which are above average. (See Table 73 page 206.)

Rural Service Evaluation

The evaluation of the garbage collection and disposal service in rural Strathcona is more complex. It is necessary to distinguish between those residents that receive a collection service and those that do not, and it is necessary to distinguish the disposal service from the collection service.

Approximately one-half of all rural residences, and nearly two-thirds of those in county-residential subdivisions receive a collection service which is very similar to that provided in urban centres. For those residents the service level must be rated as high since the normal situation for rural residents in Alberta is no collection service at all. For those residents not receiving the service the average service level, that is, no service, prevails.

TABLE 73

Garbage Collection and Disposal Service Evaluation

	Sherwood Park	Rural Areas with Collection	Rural Areas without Collection	Entire County
Level	Average	Very High	Average	Above Average
Cost	Below Average	High	High	Above Average
Satisfaction	Very High	High	Average	High
Efficiency	Above Average	Above Average	Low	Above Average
Effectiveness	Very High	Average	Below Average	Above Average

Note: Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

Those rural residents receiving a collection service also enjoy a high standard in regard to garbage disposal. Not only is their garbage disposed of in a manner similar to that of urban residents but they have the capability of undertaking their own garbage disposal at the county-operated facilities at Ardrossan and Josephburg or the facility at Looma operated by the County of Leduc.

A more average situation exists in regard to garbage disposal for rural residents not receiving a collection service. The disposal facilities available for their use are similar to those available in other rural municipalities.

All rural residents pay for the garbage services in the entire county, including Sherwood Park, through general taxation. The level of that taxation is much higher than that prevailing in other rural municipalities where service costs are usually negligible. A major portion of that cost is attributable to the collection service received by one-half of the residents.

In addition, however, the normal level of disposal facilities are operated at significantly above average costs. The relatively low tonnage handled at the Josephburg transfer station and the Ardrossan landfill contribute to poor economies of scale. These two facilities are estimated to handle less than 10 per cent of the annual garbage tonnes generated in the county yet they represent nearly 20 per cent of the cost of the total collection and disposal service and, combined with the costs associated with the use of the Looma facility, they represent in excess of 60 per cent of the total disposal service cost in the county.

In regard to service satisfaction, it is reasonable to assume that those residents receiving a collection service are highly satisfied considering that the service is not usually provided by rural municipalities. The remaining rural residents receive services in regard to garbage disposal. As far as can be determined from the Burton survey data, where high no response rates occurred for rural electoral divisions, it appears that there is an average level of satisfaction.

The level, cost and satisfaction ratings discussed above lead to cost-efficiency and effectiveness ratings which are about average for rural residents receiving a collection service but below average for the others. (See Table 73 page 206.)

In terms of rural/urban benefits and costs there is an imbalance for the garbage collection and disposal service. Sherwood Park residents are fully served and they benefit from the taxes generated in the rural parts of the county, although that benefit is less than it would be if rural service costs were at a more normal level. Only about one-half of the rural residents receive a full collection and disposal service yet all rural residents pay the same rate of taxation. That rate is increased by the taxes necessary to pay for Sherwood Park services. On the other hand, it is quite likely that if Sherwood Park were not part of the county all of rural Strathcona would receive a normal rural service level which means no collection service at all.

Possible Future Changes - User Charges

Inequities in the present provision and financing of garbage collection and disposal services in Strathcona are apparent, especially in regard to rural residents such as farmers and large acreage owners who do not receive and have little need for a garbage collection service. Similar inequities exist for residents of rural subdivisions which do not qualify for the service.

Financing of the service through user charges would eliminate much of the inequity. A user charge system, however, is not without certain difficulties in terms of implementation.

It is a relatively straightforward matter in an urban context where the garbage charge might be easily added onto the bills for water and sewer service. However, in Strathcona's case the latter aspects are handled presently by TransAlta Utilities and the county has had no cause as yet to staff a billing function within its administration. Institution of a garbage charge on its own could involve rather high costs (although it could be contracted out to a firm using computerized processes).

The City of Red Deer has a very high per capita expenditure on the garbage service which in part is related to the explicit provision for billing costs and other administrative overheads. Nonetheless Red Deer residents face charges covering collection and disposal costs of less than $4 per month. In Spruce Grove the charge is a little over $6 per month. Currently the contractor serving Sherwood Park is charging the county just under $3 per month per residence for the collection service only. There therefore appears to be some scope for instituting a reasonable user charge, despite initially high administrative costs. Such costs might well decline once the county was operating its own billing function in relation to water and sewer.

A more complex situation exists with respect to rural residences receiving garbage service and here there is no prospect of including charges on water and sewer bills. Yet the need for some form of user charge system is most pressing because of the inequitable situation currently prevailing. Those receiving a collection service could be billed quite readily for the associated costs. Cases of non-payment of bills may be more difficult or more complex to handle (compared with cutting off water or sewer service for example), and there would be a fairly high level of billing costs.

At present the county is charged around $5 per month per rural residence served. Given that rural residents in other jurisdictions are prepared to pay over $10 per month for a commercial service, there would appear to be scope for introducing a reasonable charge to those receiving a collection service.[1]

In both the urban and rural cases user charges could be set to incorporate collection costs as well as related disposal costs with any remaining costs being covered through taxation.

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[1] Ideally, in the short-term, the inequitable rural service problem might be resolved if it was possible to include some form of local service charge on the tax notices of those receiving the collection service. Unfortunately the pertinent municipal legislation does not appear to permit this practice. While it is possible to distinguish between classes of assessment (e.g. residential/non-residential) it does not appear possible to distinguish between tax-payers of the same class, some of whom receive a particular service while others do not. Garbage collection/disposal is not yet generally considered to be a utility and cannot be the subject of a local improvement charge. If the county wished to circumvent these constraints a possible route would be the pursuit of private legislation. Strathcona is unique in providing a collection service to so many rural residents and such special legislation may be justified. The alternative is to proceed directly with a conventional user charge system on an experimental basis in order to determine the real magnitude of the problems.

Collection and disposal costs identified for Sherwood Park work out to about $4.00 per residence. Billing expenses could put the figure in the $4.50 to $5.00 range which would be between that currently levied in Red Deer and Spruce Grove.

For those rural residences receiving the Laidlaw service, directly associated collection and disposal costs come to about $6.00 per month. For those receiving the Weizenbach service the collection costs alone work out to $5.20 per month and a figure of $6.00 would be reasonable if the costs of disposal at Ardrossan were included. Billing expenses could increase the appropriate figure to around $6.50 to $7.00 per residence.

Remaining expenses not covered by user charges would amount to around $100,000 for the Josephburg transfer station, for disposal at Ardrossan by individuals or by operators other than Weizenbach and for payments to Leduc County for use of the Looma facility. A user-pay system at disposal sites does not appear practical since it would require the presence of a full-time attendant and it may only encourage irresponsible roadside dumping of refuse.

Apart from consideration of user charges, the other matter worthy of attention by the county is a rationalization of disposal operations. The Josephburg station and the Ardrossan landfill are not economic operations at present. As well, per tonnage charges for disposal at Clover Bar have increased sharply in 1983 and present indications are that use of the facility by the county after 1985 may not be possible. If that should in fact be the case the main alternative for the county is to develop and operate, on its own or in conjunction with other near-by municipalities, a full-scale sanitary landfill.

K. WATER SUPPLY AND DISTRIBUTION

Water service in the County of Strathcona is provided to the hamlets of Sherwood Park, Ardrossan and Josephburg, to some of the industries near the boundary with the City of Edmonton and to some rural residents located near the main supply lines. Elsewhere in the county water supply and distribution is the responsibility of individual residents or, in many cases, rural subdivision developers. Common water sources are wells, surface water or trucked supply by private operators.

The main county service in the Sherwood Park area involves a regional water supply and distribution system. Strathcona County obtains water from the City of Edmonton under a 20 year agreement dating from 1977. It then sells most of the water it buys to TransAlta Utilities which has a franchise to distribute and supply water to Sherwood Park. The county also pays TransAlta for water services provided to a few customers located just outside Sherwood Park but adjacent to the main supply lines.[1]

Part of the TransAlta service is a facility in Sherwood Park for bulk water purchases. It is heavily used by the private operators who truck water to customers in the rural area of the county. A coin-operated facility is also available for general use.[2]

Strathcona sells some water to the Northeast Water Board which in turn supplies the participating municipalities of Fort Saskatchewan,

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[1] The franchise agreement is due to expire in December 1985 at which time the county council intends to assume direct responsibility for servicing Sherwood Park. The county owns all of the present infrastructure except for about $2 million worth.

[2] TransAlta assists the county by administering the billing of sewage charges along with the company's billing for water charges. TransAlta charges 50 cents per billing for the service. See Section L page 235.

Redwater, Gibbons and parts of the MD of Sturgeon and the County of Thorhild. Strathcona County buys back from the Board water that is used by rural Strathcona customers who are able to connect into the main water supply line.[1]

The hamlets of Ardrossan and Josephburg each have their own local supply and distribution systems. These two account for an almost negligible portion of the total water service in the county.

The only other water service is provided by the county to some industries in the extreme western industrial area.

The extent of the main water services may be gauged from data presented in Table 74. Notice that total water sales by the county dropped by some 3.6 million cubic meters from 1981 to 1982. The reduction is due to annexation and to selling policies of the county.

The reduction in sales to the Northeast Water Board was due to Strathcona County significantly increasing its selling price in order to incorporate a larger portion of the county's cost in operating its main reservoir facilities. In 1982 the Board purchased most of its water directly from the City of Edmonton at the same rate the city charges the county (from the Alberta Environment line to Vegreville) and used the county supply to cope with occasional peak demands only.

Strathcona County itself used about 5.8 million cubic meters of water in 1982 with over two-thirds of it being sold to TransAlta Utilities for the service to Sherwood Park and environs. Approximately 15 per cent of the domestic consumption is due to non-residential customers

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[1] Prior to annexation Strathcona was involved in the Strathcona-Leduc Water Board which served a few rural residents in areas of the county now lost to the County of Leduc and the City of Edmonton.

TABLE 74

Strathcona County Water Allocations 1981 and 1982

	1981		1982	
	cubic meters	1000's of gallons	cubic meters	1000's of gallons
Allocation of County Water[1]				
Northeast Water Board	2,180,000	479,600	633,510	139,372
Domestic Customers[2]	4,450,000	979,000	3,900,000	858,000
Industrial Customers	3,430,000	754,600	1,900,000	418,000
TOTAL SALES	10,060,000	2,213,200	6,433,510	1,415,372
Supply to City Customers in area annexed from Strathcona[3]	n.a.	n.a.	2,430,000	534,600
Buy-Back from N.E. Board	n.av.	n.av.	12,230	2,690

Notes: 1 cubic meter approx. equal to 220 gallons.
n.a. means not applicable.
n.av. means not available.

[1] All water is purchased from the City of Edmonton.

[2] 1981 figure includes customers in rural areas that 'tap-in' to Strathcona-Leduc and N.E. Water Boards lines as well as TransAlta services.
1982 figure includes only TransAlta customers specifically.

[3] See discussion in text page 215.

Source: County of Strathcona, Engineering Services.

in the Sherwood Park area. The decrease in domestic consumption shown in Table 74 is partly attributable to rural area customers lost to annexation, especially those that tapped-in on the Strathcona-Leduc Water Board line.

Water sales to industrial customers dropped sharply from 1981 to 1982. Much of the decrease came from the City of Edmonton's annexation of a large part of the 'Refinery Row' industrial area.

Notice that Strathcona County continues to supply customers which are now within the boundaries of Edmonton City. The city does not charge the county for the water involved but bills the customers directly itself. However, the city relies upon the county's transmission and storage facilities to serve the annexed area.[1]

The 'buy-back' from the Northeast Water Board for county residents which 'tap-in' to the Board's line is a relatively small volume. Also note that Table 74 excludes water consumption attributable to the small local systems at Josephburg and Ardrossan.

Financial Analysis

The Strathcona County Council policy since 1982 has been that the water service should operate on a strictly break-even basis with users, rather than taxpayers, covering the costs involved. That policy is consistent with that of most other municipalities.[1]

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[1] In 1982 the county estimates that it incurred costs of $336,000 related to the storage and transmission of the water supplied but the city made no payment to the county. An interim rate of $250,000 has since been agreed upon between the two municipalities and that amount will ultimately be credited to the 1982 water account of the county. A final rate is still under negotiation.

Expenditures for the water service in Strathcona County are comparatively unusual due to the complex relationships between the county and the two regional water boards, the City of Edmonton and TransAlta Utilities. The 1982 annexation also led to some service expenditure complications.

In order to present those expenditures attributable to the service to county residents it is necessary to isolate the costs associated with the regional service arrangements and to identify the costs avoided by the county through the existence of the TransAlta franchise for Sherwood Park.

TransAlta Service

The main expenditure item shown in the county accounts for the service to Sherwood Park is the cost of the water purchased by the county from the City of Edmonton ($0.9945 per 1000 gallons in 1982). Other minor cost components are the purchase of water services for the small number of customers located just outside the hamlet and the payment for the processing by TransAlta of the county's sewer billing.

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[1] In earlier years the water and sanitary sewer services were accounted together and in some years there was a cross-subsidization of the two systems with the water service surplus being used to cover the more frequent sewer service deficits. For the record it can be noted that since 1976 the water service has shown surpluses in 1978, 1979, 1980 and 1982 with deficits occuring in 1976, 1977 and 1981.

In order to standardize the expenditure for comparative purposes, the operating and maintenance costs for other than water purchases, should be added. Company records place these costs at $512,984 in 1981 and $584,875 in 1982.

Revenues generated for the county are due to the sale of water to TransAlta. The county selling price in 1982 is $1.71 per 1000 gallons. The increase over the purchase price from the City of Edmonton is primarily to cover the debt servicing costs associated with the county-owned infrastructure. Revenues from TransAlta were $1,143,751 in 1981 and $1,485,179 in 1982.

Service to City of Edmonton Customers

Costs were incurred by the county in 1982 due to the storage and transmission of water for customers located in the former county area annexed by the City of Edmonton. The calculation of the precise costs and appropriate compensation from the city are currently under negotiation. No revenues from the city have as yet been credited to the 1982 account and, in order to standardize the expenditures for the analysis here, the estimated costs (around $300,000) should be excluded from the county's reported 1982 expenditures.

Northeast Water Board Services

In 1981 the county supplied the Northeast Board with water at a rate only six cents above that which Edmonton charged the county. After reviewing the storage and transmission costs, the county increased its rate in 1982 to $0.4355 above the purchase price from Edmonton. As noted earlier, that caused the Board to purchase most of its water directly from the city and to utilize water from Strathcona only to cover short-term peak demands.

Only a very minor portion of the costs associated with the Northeast Water Board are due to Strathcona County residents. Consequently, those costs and the revenue from the Board should be excluded to standardize the data for comparisons. The costs are calculated by applying the City of Edmonton selling price to the volume of water sold by the county to the Board and by applying the current $0.4355 differential in the county's buying and selling price to that volume to estimate storage and transmission costs. The calculations produce figures of $584,395 in 1981 and $200,605 in 1982 as the county expenditure attributable to the Northeast Board service. All revenues received from the Board are discounted on the revenue side.

Some $6,100 in county expenditure is due to water purchased from the Northeast Board (at $2.27 per 1000 gallons) for county customers which 'tap-in' to the Board's line. Revenues are received from those customers through user charges levied by the county (see user charge section below).

Strathcona-Leduc Water Board

Unlike the arrangement with the Northeast Water Board no extra operating expenses were incurred by the county for supplying water to the Strathcona-Leduc Water Board. The county sold the water to the

Board at the same rate as it paid the city.

The water purchased by the Board was for residents outside Strathcona County (with the exception of a few rural Strathcona customers prior to annexation). Therefore, the total revenues received by Strathcona from the Board and the equivalent expenditure for city water purchased by the county are both discounted.

User Charge Revenues

TransAlta Customers: TransAlta charges its franchise customers its own rate to cover the cost of water purchased from the county plus additional operating and administrative expenses. The charges are based on a monthly flat rate plus a commodity charge for volumes consumed. From 1978 to 1982 the charges remained unchanged, resulting in an average residential bill of $16.50 per month.

In 1982 the charges were increased to cover the increased cost of water from the county. In addition a surcharge was added for several months in 1982, at the county's request, to help eliminate accumulated deficits incurred by the county to 1981. Average residential user charges were $22.64 per month while the surcharge was in effect and $20.11 per month after it was dropped.

Rural Area Customers: For customers outside Sherwood Park and along the Northeast Water Board line the county charges a flat rate of $10.00 per month and a commodity rate the same as that charged to TransAlta, that is, $1.71 per 1000 gallons. For residential customers, the average charge is currently $22.83 per month.

Ardrossan and Josephburg Customers: The water charge for the 80 or so residential customers in the two small hamlets is a flat rate of $4.00 per month. The rate is maintained artificially low because the quality of water provided is considered to be poor. As a result both local systems encountered sizeable deficits in 1982 ($15,120 for Ardrossan and $15,550 for Josephburg).

Total Operating Revenues and Expenditures

Table 75 summarizes the expenditures for the Strathcona County water service and Table 76 does the same for the revenues. The discounting performed to eliminate revenues and expenditures attributable to services provided for customers outside the county is indicated. Note that the data presented is based upon estimates and discussions with county staff.

The total operating expenditure declined from 1981 to 1982 largely because of the loss of industrial customers to annexation. On the other hand, operating revenues increased because of the increased charge by the county for water. The result is an increase in the operating surplus from five per cent to 20 per cent of the total revenue.

The revenues are shown in Table 76 by the three main county service systems. In 1982 the Sherwood Park service by TransAlta contributed about 65 per cent of the total revenues with most of the remainder coming from residential customers. The two local systems in Ardrossan and Josephburg contributed little revenue. In fact, the revenue from the two hamlets barely covered 10 per cent of the operating costs of their water systems.

TABLE 75

Strathcona Water Service Operating Expenditures 1981 and 1982

	in dollars	
	1981	1982
EXPENDITURE		
as per financial statement after normal discounting[1]	2,504,813	1,782,579
plus additional costs incurred by TransAlta franchise service	512,984	584,875
minus est. costs due to services to Edmonton City customers	nil	-300,000
minus costs due to supplies to Northeast Water Board[2]	-584,395	-200,605
plus costs for county customers on NE Board line	6,100	6,100
minus cost of water supplied to Strathcona-Leduc Water Board	-386,047	-22,626
TOTAL OPERATING EXPENDITURE	2,053,455	1,850,323

Notes: 1 see footnote page 62.
2 calculations include cost to county of water supplied plus estimated costs associated with storage and transmission. Based on volumes reported in Table 74 page 215. Volume rates of $0.7723 per 1000 gallons in 1981 and $0.9945 per 1000 gallons in 1982 were applied plus $0.4355 per 1000 gallons to reflect storage and transmission costs.

Source: See discussion in text pages 215 to 220.
Strathcona County financial statements and year-end trial balances.
Table 74 page 214.

TABLE 76

Strathcona Water Service Operating Revenues 1981 and 1982

	in dollars	
	1981	1982
REVENUES		
as per financial statement after normal discounting[1]	2,947,625	2,541,863
minus revenue from Northeast Water Board	-399,161	-185,144
minus revenue from Strathcona-Leduc Water Board	-386,047	-22,626
TOTAL OPERATING REVENUE	2,162,417	2,334,093
Excess of Revenue over Expenditure	108,962	483,770
REVENUES BY SERVICES (estimates)		
TransAlta Service to Sherwood Park	1,144,000	1,488,180
Rural County Customers[2]	1,014,270	841,970
Ardrossan and Josephburg	4,145	3,940

Notes:
[1] see footnote page 62. Also provincial conditional grants discounted since they were for interest stabilization and other revenue from own sources discounted since it is considered to be an internal fund transfer.
[2] primarily industrial customers but also includes rural customers outside Sherwood Park and along Northeast Water board line.

Source: same as Table 75.

Public Opinions

Respondents to the 1979 Burton survey were asked to rate the provision of the water supply service as 'good,' 'bad' or 'average.' Only the responses of the urban lifestyle respondents (essentially residents of Sherwood Park) are relevant to the present analysis: 76 per cent of this group rated the service provision as good, 17 per cent thought it to be 'average,' and only 5 per cent felt it to be 'bad.' This highly positive assessment is all the more remarkable since the survey was conducted early in the year following a major rate increase.

There was a very high non-response rate for the rural estate and 'traditional rural' categories. Of the few who did respond in these categories the 'traditional rural' residents tended strongly to rate the provision as good. Presumably most of these residents rely on wells or other private water systems, although a few might have benefitted from being on the water board line service or by being served by TransAlta.

By contrast the respondents from rural subdivisions tended strongly to rate the service provision as 'bad.' It is known that the water quality in the case of the Ardrossan and Josephburg systems leaves very much to be desired, so much so that the county has felt unable to justify raising the water rates charged. Apart from these two hamlets the vast majority of rural residents in the county are not provided with a county-sponsored water service. (See also the Electoral Division breakdowns in Appendix III, pp. A-53 and A-60.)

Service Efficiency and Effectiveness Comparisons

Comparative revenue and expenditure data are presented in Table 77 for the sample urban municipalities and two rural municipalities. It is the urban centres which are most comparable to Strathcona County in terms of water supply and distribution services.[1]

The per capita expenditure level for Strathcona County is considerably above the 4C average in 1981. But in that year, in excess of 40 per cent of the water consumption is attributable to services provided to the industrial area. After annexation, and the consequent decrease in the industrial area within the county, the expenditure level drops to one which is very similar to Fort McMurray and Grande Prairie. The very low level of expenditure for Red Deer, which reduces the 4C average, is explained by the fact that the system is an old one currently operating at full capacity.[2]

Despite the loss of customers due to annexation, notice that the per capita revenues increased by almost eight per cent in 1982, as a result of increases the county introduced for the sale of water. This, combined with the 10 per cent reduction in expenditures from 1981 to 1982, produces an operating surplus (excluding debt charges)

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[1] The two rurals are included for the sake of completeness. The County of Leduc supplies water to the Town of Beaumont, the Hamlet of Nisku, Nisku Industrial Park, the Edmonton International Airport and about 35 acreages and 15 farms. Sales to Beaumont, which has its own distribution system, account for two-thirds of the water volume involved. The MD of Sturgeon serves some hamlets and rural subdivisions plus a few industrial customers (a rapeseed plant and the W4 Industrial Park north of Fort Saskatchewan). The system is quite fragmented with nine different water sources and 14 main servicing points.

[2] So much so that a $20 million expansion is currently underway.

TABLE 77

Water Service Revenue and Expenditure in dollars per capita, Comparison Municipalities and Strathcona County 1981 and (Strathcona 1982)

		in dollars per capita		
		Revenue	Expenditure	Surplus
Airdrie		80.80	52.50	28.30
Fort Saskatchewan		75.60	71.60	4.00
Leduc		79.60	51.80	27.80
Spruce Grove		62.65	51.80	10.85
Fort McMurray		88.10	56.50	31.60
Grande Prairie		73.50	56.90	16.60
Red Deer		50.30	27.85	22.45
St. Albert		48.40	38.40	10.00
4C Average		63.00	42.40	20.60
County of Leduc		52.45	22.25	30.20
MD of Sturgeon		27.05	16.90	10.20
Strathcona County	1981*	69.80	66.25	3.55
	1982*	75.30	59.70	15.60

Note: see footnote page 62 for explanation of revenues and expenditures. As well, note that provincial conditional grants are excluded from revenue since these are considered to be for interest stabilization on debenture payments.

* For both years, population of 31,000 used to calculate per capita. That is roughly the population served by county-sponsored water services.

Source: Financial Statements.
Also see Tables 75 and 76 for Strathcona data.

very near the 4C average.

Table 78 presents some other comparative indicators. The expenditure per 1000 gallons of water consumed for Strathcona is almost identical to the 4C average in 1981. That expenditure increases noticeably in 1982 but, nevertheless, it is very near that experienced by Fort McMurray, Grande Prairie and St. Albert.

The indicators in terms of km of water mains show Strathcona spending much more per km than all but Fort McMurray, presumably due to the service provided to the comparatively extensive western industrial area. The population served per km is relatively high for Strathcona. That is essentially a result of the concentration of population served in Sherwood Park more than offsetting the industrial area service.

It is important to note that the recent system expansion for Strathcona, begun in 1979 and now completed, added about 12 km of water mains. The expansion involved expenditures of $7.5 million and it resulted in a massive increase in the water system capacity. It is capable now of serving up to 100,000 persons - three times its present requirements.[1]

Table 79 presents a comparison of user charges imposed in the municipalities for the water service provided. With the exception of Red Deer (where the system's operation is optimized because it operates at full capacity), all the urban municipalities in 1982 levy user charges which are very similar to those in Sherwood Park. Notice that

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[1] The system expansion resulted in an increase in the km of water mains within the county between 1981 and 1982 when annexation might have been expected to lead to a decrease.

TABLE 78

Selected Comparative Data for Comparison Cities and Strathcona County 1981 (and 1982 for Strathcona)

	Water Volume (1000's of gallons)	Expenditure ($'s) per 1000 gallons	Water Mains (in km)	Expenditure ($'s) per km Mains	Population Served per km Mains
Fort McMurray	1,098,300	1.58	142	12,240	217
Grande Prairie	961,400	1.43	193	7,120	125
Red Deer	1,800,900	0.70	296	4,270	153
St. Albert	785,200	1.53	167	7,180	187
4C Average	n.a.	1.20	n.a.	6,990	165
Strathcona County					
1981*	1,733,600	1.18	160	12,830	194
1982*	1,278,700	1.45	162	11,420	191

n.a. not applicable.

* For both years, population used is 31,000 which is roughly the number of persons receiving water services from the county.

Source: Financial Statements. Expenditures discounted as per footnote page 62.
Survey by UAG staff.
See Table 75 for Strathcona expenditures.

TABLE 79

Average Monthly Residential Water Rates, Comparison Municipalities and Strathcona County

Note: Rates based on a monthly water consumption of 7500 imperial gallons or 34 cubic meters.

Airdrie	$20.39 in 1982
Fort Saskatchewan	$22.16 in 1982
Leduc	$22.10 since June 1982; $18.60 in 1981
Spruce Grove	$18.39 in 1982/83; $16.00 in 1981
Fort McMurray	$21.50 since April 1981
Grande Prairie	$22.50 in 1982; $18.75 in 1981 ($29.25 in 1983)
Red Deer	$12.50 since March 1982
St. Albert	$24.51 since April 1982; $20.98 in 1981
Leduc County	$24.30 since May 1982
MD of Sturgeon	$34.13 since September 1981
Strathcona County	
- Sherwood Park	$22.64 since late 1982; $16.49 from 1978-81 ($20.11 in 1983)
- Sherwood Park vicinity	$22.83 in 1982
- Josephburg & Ardrossan	$4.00 since 1981

Source: Public Utilities Board and Municipal Officials.

Sherwood Park residents experienced no increase in charges from 1978 until 1982 and that, with the removal of the county-imposed surcharge, the rates decrease in 1983.

For the county customers outside of TransAlta's franchise area of Sherwood Park the user charges are slightly higher. Those customers, whether residential or industrial, are levied charges of $10 per month basic plus $1.71 per 1000 gallons consumption charge. The absence of any variation in charges for rural area customers is intended to ensure that industrial customers do not indirectly subsidize Sherwood Park residents and to ensure that there is no great disparity between Sherwood Park rates and those in the remainder of the county.[1]

Ardrossan and Josephburg customers receive a very good deal in terms of charges but that is offset by the relatively poor quality of water provided. The losses encountered for those two small systems ($30,670 in 1982) are absorbed by the service as a whole.

With regard to the level of service provided there is little scope for a wide range - either the service is adequate or it is not. It may be noted that the service to Sherwood Park appears to involve a reliable supply of potable water with little in the way of easily avoidable service interruptions or rationing. As well, special provisions exist for a rapid response to problem situations if they should occur.

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[1] In Sherwood Park, TransAlta charges a flat rate of $3.25 plus $2.25 per 1000 gallons which covers administration costs plus the $1.71 per 1000 gallons charged TransAlta by the county. If the company received a bulk discount from the county, as it did prior to 1982, the consumption charge for rural area customers would have to be higher to compensate for the reduction in revenues from TransAlta.

The few rural area residents that receive a water supply from TransAlta from a 'tap-in' to the Northeast Water Board Line receive a service level which must be considered high. The normal situation in rural municipalities, including most of the rural area of Strathcona County, is that residents must obtain their own water through wells, surface sources or commercial distributors.

The poor water quality provided for those residents using the Josephburg and Ardrossan systems warrants a low rating for service level. This is largely compensated for by the very low service charges imposed.

Satisfaction ratings from the 1979 Burton survey for residents receiving a county-sponsored water service were quite high, especially for Sherwood Park residents. Somewhat lower levels of satisfaction were expressed by residents in the Josephburg and Ardrossan vicinities.

The service ratings and the cost-efficiency and effectiveness aspects are summarized in Table 80.

Rural/Urban Cost-Benefits

There is little imbalance apparent in the water service in regard to rural/urban costs or benefits. That is because the cost of the service is paid by those that receive it and because there is little difference in rural and urban user charges for the main system.

The users of the Ardrossan and Josephburg systems are clearly benefitting at the expense of the service users as a whole. But the deficits incurred in operating those two local systems are negligible

TABLE 80

Water Supply and Distribution Service Evaluation

	MAIN SYSTEM[1]	ARDROSSAN & JOSEPHBURG
Level	Average[2]	Low
Cost	Average	Very Low[3]
Satisfaction	High	Low
Efficiency	Average	Below Average
Effectiveness	Above Average	Below Average

Notes:

1 includes Sherwood Park and environs, western industrial area and Northeast Water Board line customers.

2 for the few rural residential customers the service level would be high in relation to the average situation of no service in rural areas.

3 Refers to cost to users. The systems themselves are operated at average levels of expenditure but very low levels of revenue.

Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

in terms of the total water service expenditures and revenues.

The vast majority of rural Strathcona residents do not receive the municipal water service but neither are they burdened with the costs of operating the service. However, with Strathcona's integrated urban/rural tax structure there is always the possibility of some spillover, especially in relation to capital costs, whereby county residents not receiving the service may be effectively subsidising those that do through general taxation.[1]

Future Considerations

The debt charges transferred in 1982 to the general government function pertain to the major trunk system expansion from 1979 to 1981.

The expansion was initially financed by debenture but the county has since decided to take advantage of the provincial government's Revolving Trunk Servicing Program. As a consequence the Alberta Home Mortgage Corporation now owns the new trunks and is bearing the debt charges involved. However, the county is liable to pay back 50 per cent of the principal and interest by March 1993 and the remaining 50 per cent by March 1998.

The county's ability to meet these payments will depend upon the extent to which the new capacity is utilized and paid for by developers of the serviced land. In the event of a shortfall the county has the following options:

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[1] An example of such a situation arose in 1982 when a significant amount of water service debt charges were transferred to the general government function. Since that function is mostly paid for by general taxation, the water service debt charges would have been covered in part by taxes from all county residents. Such imbalances, however, would be offset on those occasions (such as 1980) when surpluses generated by the water service are transferred to general municipal revenues.

- It could re-debenture for the amounts needed, but that would raise the prospect of debt charges being borne by all county taxpayers rather than just water service users.
- It could establish a reserve as a shortfall contingency. While that would involve a surcharge on the user charges it would ensure that the water service is paid for only by those county residents that benefit from it.
- It could set aside a portion of its existing reserves.

The last option is the one presently being exercised by the county through monies in its Heritage Trust Reserve. That reserve contains about $7.6 million remaining from the county's allocation through the provincial government's Debt Reduction Program of 1979. The interest accruing is transferred to operating reserves but the principal amount is being left intact as a contingency fund in case of future financial difficulties.

If other services create claims on the Heritage Reserve then it may be necessary to exercise the second option mentioned above. The water service capacity presently constitutes a massive over-provision (it can serve 100,000 people) and, given the current economic climate, it seems unlikely that all or even most of the capacity will be utilized by 1998.

The situation for the operation of the water service in the near to medium term is difficult to assess at this time. Continued economies of scale in the service are possible through the county supplying Edmonton customers in the annexed area and through the supply of water to the Northeast Board.

However, negotiations are still underway with the city for a rate to cover the county's costs incurred in the storage and transmission of water to the annexed area. Depending on the rate settled upon the economies of scale advantage may be lost. Also, the county probably will have to set a more competitive rate if it wants to attract more business from the Northeast Water Board, especially to cover the additional costs which it has incurred to facilitate this service (i.e. provisions to maintain the pressure on the Board line). But it is doubtful that the county can set a competitive enough rate while there is still so much spare capacity in the alternative line now preferred by the Board.

There is also the matter of the county's intention not to renew TransAlta's franchise in December 1985 and to assume full and direct responsibility for the water service to Sherwood Park. The economics of the change in approach will probably be judged in terms of the implications for the level of user charges. At present those for Sherwood Park are quite favourable in relation to those in comparable municipalities. It will be a considerable challenge for the county to maintain the relatively low rates especially with the possible difficulties in debt repayment which may arise if anticipated new growth does not materialize.

A further source of upward pressure on residential water rates could be the declining proportion of demand from industrial users. Residential customers will have to bear an increased share of fixed costs unless new industrial demands materialize.

L. SANITARY SEWAGE COLLECTION AND TREATMENT

Strathcona County provides a sanitary sewage service to Sherwood Park, some industries in the western industrial area and, through small local systems, to the hamlets of Josephburg and Ardrossan. Rural residents have their own septic field or pump-out systems and, with the exception of the lagoon facilities available at the Ardrossan landfill site, the county is not involved in sewage services to the rural population.

Sewage from Sherwood Park flows by gravity to the lagoon system operated by the City of Edmonton at Bremner. That from the industrial area is treated at the activated sludge treatment plant at Gold Bar, also operated by Edmonton. The city charges Strathcona County for both of these sewage treatment services under an agreement dating from 1974.

Financial Analysis

The main system serving Sherwood Park and the industrial area is operated on a 'user-pay' basis with revenues from user charges more than covering the expenses of about $640,000 in 1981 and $795,000 in 1982 (discounted as per the footnote page 62 and excluding Ardrossan and Josephburg costs).

The major expenditure item is the payment by the county to the City of Edmonton for the sewage treatment services at Bremner and Gold Bar. These accounted for 45 per cent of the expenditure in 1981 and 66 per cent in 1982. The charges levied by the city have increased sharply in recent years as indicated below:[1]

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[1] Source is City of Edmonton Water and Sanitation Department.

	Dollars per 1000 gallons
1981	0.2681
Feb. 1982	0.4700
Jan. 1983	0.5118
Apr. 1983	0.5536

Over 90 per cent of the annual charges from the City of Edmonton are due to sewage from Sherwood Park. The balance is due to industrial sewage from the industries which use the Gold Bar facilities. The January 1982 annexation decision has meant that the treatment charges for many of these industries are now levied directly by the city, although the sewage continues to be transmitted through county pipelines.[1]

Sewage charges are billed for Sherwood Park by TransAlta Utilities as part of its water service franchise while other property-owners are billed directly by the county. The effect of the annexation is indicated by the sewage service revenue data shown below:

TABLE 81

Sanitary Sewage Revenues, Strathcona County, 1981 and 1982

	1981		1982	
	$'s	% of total	$'s	% of total
Sherwood Park	636,460	72.7	1,032,675	94.4
Industrial Areas	234,660	26.8	55,985	5.1
Ardrossan & Josephburg	3,950	0.5	5,190	0.5
TOTAL	875,070	100	1,093,850	100

Source: County of Strathcona Comptroller's Department.

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[1] The county is currently establishing a method of charging the city for the transmission service.

The much reduced servicing load associated with the industrial areas means that the sanitary sewage service is of benefit, almost solely, to Sherwood Park residents. Expenditures on the service increased despite the loss of industries in annexation because of the large increases in the treatment charges of the City of Edmonton.

The cost to those receiving the sewage service is based on a flat rate charge for residences and on metered water consumption for industrial and commercial customers. The flat rate monthly charge for single-family dwellings in Sherwood Park was $6.89 in 1981 and $10.42 in 1982.

The service is now operated on a strict user-pay basis and it is expected to break-even each year. Prior to 1982 it was common for the sewage service to operate at a deficit and to be subsidized by revenues from the water service.

The small local systems at Ardrossan and Josephburg do not operate on a user-pay basis. In 1982 the revenues from the two systems covered only 14 per cent of their operating cost. However, the total deficit of $31,670 is quite small and it is effectively covered by revenues from the main system. Residential customers at Ardrossan and Josephburg are charged a flat monthly rate of $5.20 but a significant rate increase is imminent.

Public Opinions

In the 1979 Burton study the question probing satisfaction with the provision of sewage service incorporated a combined concern with sewage and drainage. Not surprisingly, given the sewage service emphasis on

Sherwood Park and notwithstanding the inclusion of drainage aspects, the question drew high non-response rates from those on acreages, small-holdings and farms. Of those who did respond, rural subdivision residents tended to rate the service as bad while 'traditional rural' respondents rated it as good. It is to be expected that many of these responses reflected drainage concerns in part.

For the urban respondents 59 per cent rated the service as good, 18.7 per cent found it to be average, while 19.3 per cent said it was bad. (See Appendix III, pp. A-54 and A-61.)

Service Efficiency and Effectiveness Comparisons

The main sewage service provided in Strathcona County is comparable only with other urban municipalities. This is especially true after the annexation since Sherwood Park alone now accounts for almost 95 per cent of the service.

Some rural municipalities such as the counties of Leduc and Parkland provide a service to small hamlets similar to that provided by Strathcona to Josephburg and Ardrossan. Expenditures are usually quite small, however, and the comparative analysis which follows concentrates upon the service provided to urban centres.

Table 82 presents the revenue and expenditure data in per capita terms for Strathcona and the sample urban municipalities. Note that the level of revenues generated by the county is quite close to the 4C average. The expenditure level, however, is somewhat higher than all the comparison municipalities except Airdrie and Fort McMurray. That is attributable

TABLE 82

Sewage Service Revenues and Expenditures, Comparison Urban Municipalities and Strathcona County, 1981 (and 1982 for Strathcona)

	dollars per capita		
	Revenues	Expenditures	Surplus
Airdrie	43.50	37.25	6.25
Fort Saskatchewan	14.00	4.65	9.35
Leduc	34.40	12.80	21.60
Spruce Grove	29.70	7.05	22.65
Fort McMurray	38.40	26.40	12.00
Grande Prairie	20.45	10.25	10.20
Red Deer	42.50	15.70	26.80
St. Albert	24.15	12.35	11.80
4C Average	33.15	16.40	16.75
Strathcona County			
1981*	29.10	21.55	7.50
1982*	38.70	26.85	11.80

Note: see footnote page 62 for explanation of revenue and expenditure data.
Also, provincial grants discounted as they are considered to be interest stabilization funds.

* population used in both years is 31,000 which is roughly the population receiving a sewage service.

Source: Financial Statements; Population used is from Appendix Table II-1 page A-7.

to the distance of transmission to treatment facilities required by the county and the rather high level (and cost) of treatment undertaken at the City of Edmonton facilities.

The 'surplus' level for Strathcona is, particularly in 1981, less than one-half that of the 4C average. Note that the expenditures shown exclude debt charges, however, and much of the operating surplus for many of the municipalities would be required for debt repayments.

Table 83 presents sewage mains data and related statistics. Notice that despite the loss of the annexed area the length of mains in Strathcona increases from 1981 to 1982. That is due to recent expansions in the trunk sewage system undertaken in 1979 and now completed. The expansion, done in conjunction with the water service expansion discussed in the previous service section, involved almost 12 km of mains and an expenditure of some $8 million. The capacity of the main system was increased to serve a population of 80,000 compared with the 30,000 to 31,000 presently served.

The statistic of 'population served per km of mains' shown in Table 83 embraces several factors such as the extent to which the available mains capacity is used, density of population and distance from the major load points to the treatment facilities. The data show that the Strathcona service is very much in line with the population levels of the other municipalities. The compactness of the hamlet of Sherwood Park tends to offset the current over provision of capacity and the distance required for transmission to treatment facilities.

Operating expenditures per km of mains (and per capita as noted earlier) are well above the 4C average especially if the 1982 data are

TABLE 83

Sewage Service Comparative Statistics, Comparison Urban Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

	Length of Mains (km)	Pop. served per km Mains	Op. Expenditure ($ s) per km Mains
Airdrie	49.4	167	6,235
Fort Saskatchewan	61.6	197	916
Leduc	69.0	177	2,261
Spruce Grove	54.6	179	995
Fort McMurray	188.5	163	4,312
Grande Prairie	156.7	154	1,579
Red Deer	235.8	193	3,020
St. Albert	180.5	172	2,134
4C Average	n.a.	171	2,761
Strathcona County			
1981*	178.5	174	3,743
1982*	182.0	170	4,578

n.a. not applicable

* population used is 31,000 which is roughly number of persons served by a sewage system.

Source: Financial Statements and calculations by UAG staff.

considered. The high level is partially explained by the implications of serving the industrial area including two separate lines to two different treatment facilities. Another factor is the high standard of sewage treatment performed, especially in comparison with the low-cost but inferior lagoon system used in Grande Prairie and some of the smaller towns.

Nevertheless, the treatment charges levied by the City of Edmonton despite recent increases are probably lower than the county could hope to achieve on its own for the same level of treatment.

The relatively high expenditure level for Strathcona is reflected in the user charge comparison shown in Table 84. With the exception of Airdrie and Fort McMurray, the 1982 charges for Sherwood Park are comparatively high. Those charges increased by over 50 per cent from 1981 in order to cover the increases in treatment charges by the City of Edmonton.

The service level and cost are both rated above average based on the data presented above. In regard to service satisfaction the 1979 Burton survey indicated that Sherwood Park residents did not rate the sewage service nearly as high as the water service (78 per cent rated it as average or good compared to 93 per cent for the same ratings of the water service). This may be because the question on sewage was combined with drainage concerns and some dissatisfaction may pertain to storm sewer problems. Recent rate increases for the sewage service would be expected to diminish public satisfaction from the time the survey was conducted, so at best it appears that the suitable satisfaction rating is average.

Table 85 presents the overall ratings for the main Sherwood Park sewage service. Cost-efficiency and effectiveness are rated below

TABLE 84

Monthly Residential Sewage Service Charges, Comparison Municipalities and Strathcona County

Note: where relevant, rates have been calculated on the basis of an average monthly water consumption of 7500 gallons per residence.

Airdrie	$15.29 (75% of water charge) in 1982.
Fort Saskatchewan	$ 2.00 (flat rate) since January 1982.
Leduc	$ 5.90 (flat rate) since June 1982; $4.90 (flat rate) in 1981.
Spruce Grove	$ 5.00 (flat rate) since 1981.
Fort McMurray	$10.75 (50% of water charge) since April 1981.
Grande Prairie	$ 4.71 (flat rate) in 1982; $6.12 (flat rate) in 1983; $3.97 (flat rate) in 1981.
Red Deer	$ 8.07 (flat rate) since March 1982.
St. Albert	$ 5.00 (flat rate) since April 1982.
Leduc County	for Buck Creek hamlet $5.00 (flat rate) since May 1982.
Parkland County	for Lodgepole hamlet $3.00 (flat rate); for Rocky Rapids hamlet $8.00 (flat rate) 1982.
Strathcona County	
Sherwood Park & environs	$10.42 (flat rate) in 1982/83; $6.89 (flat rate) in 1981.
Josephburg & Ardrossan	$ 5.20 (flat rate) in 1981 and 1982.

Source: Public Utilities Board and Municipal Officials.

average due to the high operating costs and user charges that the service entails.

The small local sewage systems for Ardrossan and Josephburg operate at a considerable annual loss. The user charges levied are similar to those for other small hamlets in rural municipalities (see Table 84) but a significant increase is anticipated to bring the rates in line with those in Sherwood Park. No public satisfaction ratings which relate specifically to the local sewage service can be derived from the Burton survey data and, in the absence of any detailed analysis, the small hamlet systems are rated as average in terms of service level and cost-efficiency.

Apart from the deficits incurred at Ardrossan and Josephburg, the operation of the sewage service has no rural/urban benefit-cost imbalances. The user-pay policy ensures that the cost of the service is paid for by those that receive it.

Future Considerations

Special financing considerations similar to those discussed earlier for the water service are required for the sewage service. These pertain to the future levels of population growth and development necessary to pay for the service expansion undertaken since 1979.

Service users are currently shielded from any debt charges associated with the expansion to accommodate a population of 80,000. This is because the county has taken advantage of the Revolving Trunk Service Program operated by the Alberta Home Mortgage Corporation whereby

TABLE 85

Sewage Collection and Treatment
Service Evaluation Main
Sherwood Park Service Only

	Sherwood Park
Level	Above Average
Cost	High
Satisfaction	Average
Efficiency	Below Average
Effectiveness	Low

Note: Possible Ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

50 per cent of the principal and interest payments are not due until 1992 with the other 50 per cent not due until the end of 1997. It is intended that the debt would be paid off primarily with charges collected from the developers of the serviced land.

Should insufficient development materialize, however, the county would have to resort to other repayment measures. One method would be to re-debenture any shortfall in the required payments but with this option there is the possibility that the debt charges could become a burden on general tax revenues and thereby introduce a benefit-cost imbalance especially for rural Strathcona residents who do not receive the sewage service.

Another method would be to increase user charges to enable the accumulation of a contingency reserve. Such a procedure, however, would increase the already relatively high user charges to a level well above what would be normal for urban residents.

The measure currently being undertaken by the county involves the maintenance of a special reserve (Northeast Sanitary Trunk Sewer Reserve) of $2.5 million. The amount has been derived from the sale of the newly installed trunks to the Alberta Home Mortgage Corporation. The $2.5 million is the difference between what the county paid out itself, in cash, when the expansion was undertaken ($5.2 million) and the selling price ($7.7 million) which included an allowance for interim interest charges. It is also possible that the Heritage Trust Reserve, mentioned in connection with the water service, could be drawn upon.

Given the current low growth scenarios for the future, it is improbable that all of the new capacity of the sewage system will be taken up by the time the debt payments are due. Re-debenturing and/or an increase in user charges then become real possibilities. Further upward pressure on user charges could arise if significant industrial development does not materialize to bear a share of the infrastructure costs.

M. FAMILY AND COMMUNITY SERVICES

Strathcona's Department of Family and Community Services provides an extensive and comprehensive range of preventive social services to the residents of the county. A large number of services, programs and projects are tailored to meet the needs of various groups and are provided under the following program areas: Seniors, Community Care, Counselling, Child Care, Youth and Family Living.

Services are provided directly to individuals or groups by the department staff or by financial, technical and advisory assistance channeled through voluntary groups concerned with the social welfare of the community. All Community Care and Counselling services, as well as a number of Seniors programs are provided directly by the Department. It is estimated that the direct delivery of services accounts for some 45 per cent of departmental expenditures.

The Family and Community Services Department operates from two locations in Sherwood Park with a full-time staff of 12 and a part-time staff of 60, the latter being mainly involved in Community Care and Family Living program areas. The staff include a psychologist, a registered nurse and a social worker while counselling services are provided by three full-time counsellors. The RCMP bring family and youth problems that require counselling help to the attention of the Department.

Strong emphasis is placed on the delivery of various services to rural residents in order to ensure adequate availability and adequate participation in rural areas. Staff travel time and transportation expenses reflect the cost incurred in the delivery of services to rural areas. If the county did not facilitate the delivery of social services to rural areas, the family and community services needs of the rural population could not be adequately provided and the participation rate by the rural component of the population would tend to fall.

Residents of Sherwood Park and the surrounding area make a disproportionately high use of counselling sessions which are held, for the most part, in the Department's offices in Sherwood Park. The Department's efforts to bring counselling services to rural residents could possibly be enhanced by conducting periodic sessions at various regional locations throughout the county.

A ten-member Family and Community Services Board, composed of one County Council member and nine residents from various areas of the county, provide advisory services to the Council and the Department. Council policy aims to have adequate representation from all parts of the county whenever this is feasible. At present there are six members from urban areas and three from rural areas with one position being vacant. Policy and planning input on social services is further provided through a Senior Citizens' Advisory Committee, Life Education Board, Strathcona County Information Centre Board, and Strathcona Youth Association Board.

Financial Analysis

Revenue and expenditure figures for the family and community services for 1981 and 1982 are shown below:[1]

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[1] Source is Financial Statements. Data is discounted as per the footnote page 62.

TABLE 86

Operating Revenues and Expenditures, 1981 and 1982 for Family and Community Support Services, Strathcona County

	1981	1982
Revenues:		
Provincial Grants	390,749	543,034
Sales of Goods & Services	94,580	81,823
Other	2,605	3,690
Total	487,934	628,547
Expenditures:		
Salaries, Wages & Benefits	440,973	544,163
Contracted & General Services	163,043	152,343
Materials, Goods, Supplies	13,416	11,892
Grants to Organizations	91,619	10,093
Total	709,051	718,491
Net Cost of Operations	221,117	89,944

The ratio of revenues to expenditures is large (68 per cent in 1981, 87 per cent in 1982) producing relatively small net expenditures. Provincial conditional grants constitute the major revenue component, increasing by 29 per cent from 1981 to 1982.

Total expenditures for the two years have remained almost constant. In 1982 the staff employed by the Strathcona Youth Association was incorporated into the Department's manpower complement. The Department had been providing the Association with a grant to cover its manpower costs. The administrative change produced an increase in the manpower expenditure with an accompanying decrease in the grants to organizations. Due to the large increase in 1982 revenues over 1981 and a corresponding small increase in expenditures, the net cost of operations decreased by almost 60 per cent between 1981 and 1982.

Provincial conditional grants in this service area consist primarily of funding provided through the Family and Community Support Services Program (FCSS) which accounted for 96 per cent of provincial assistance to Strathcona in this service area in 1982. The remaining portion of the grants is derived through the Family Day Home Subsidy and the Handicapped Child Care Programs.[1] Through this cost-sharing program, the province funds up to 80 per cent of costs of eligible preventive social services and programs provided by a municipality.[2]

Prior to 1981, a municipality would submit requests for funding on a project by project basis, a time-consuming and cumbersome administrative process for both the municipality and the provincial funding agency. In the 1981/82 year, the funding system was converted to an across-the-board per capita basis. FCSS Program guidelines changed to allow municipalities greater flexibility in providing services suited to their particular requirements. These guideline and funding changes affected the services in Strathcona in two ways: the FCSS program grants increased dramatically in 1982; and funding for services that were previously financed entirely by the municipality shifted towards the 80/20 cost-sharing arrangement.

FCSS Program funding is provided for two functions: Administration/Planning and Program Delivery. Funding for Administration/Planning consists of

- \$9.50 per capita for the first 5,000 population
- \$1.10 " " " " next 7,000 "
- \$0.70 " " " " remaining "

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[1] Family and Community Services Department also participates in student and temporary employment programs funded by the province.

[2] Application of federal transfers under the Canada Assistance Plan results in an actual Federal-Provincial-Municipal cost-sharing split of 30-50-20 per cent.

Program Delivery funding consists of

- a minimum of $12.00 per capita for non-city programs.
- a minimum of $10.00 per capita for city programs, including the County of Strathcona.

The 1981 FCSS Program funding change was primarily undertaken to eliminate inequities in the provision of funds which tended to favour rural and smaller urban municipalities over the larger centres when translated to a per capita basis. The change reduced the per capita differential and gave the larger urban centres a bigger and more equitable share of available funds.

As indicated previously, Strathcona benefited from these funding changes. However, since the county is considered to be on a par with cities for FCSS Program purposes the fact that it has both urban and rural population components is disregarded. If the per capita grants were to be applied separately to both urban and rural population components, Strathcona would have received an additional $83,000 for 1982/83.

Public Opinions

Public opinion survey data for Sherwood Park (1976) and for the county as a whole (1979) produced a large proportion of respondents who gave no response to questions about the provision of this service or who were not aware of its existence. The service, therefore, seems to have been of relevance to a minority of the county population - although recent usage trends indicate an increasing demand for Department services throughout the county.

Those who did respond to the 1979 survey tended to rate social service provision as 'good' (65 per cent) or as 'average' (30 per cent). Less than five per cent of respondents rated services as being 'bad.' Urban and traditional rural users were most satisfied. The estate group had the lowest response rate.

Service Efficiency and Effectiveness Comparisons

Table 87 presents revenue and expenditure data for family and community services in Strathcona and in those comparison municipalities which provided the service.

Service costs are closely conditioned by the level of provincial grants which constitute the major revenue item for every municipality. Expenditures in Fort McMurray, Red Deer and Strathcona have tended to be well in excess of grant receipts indicating a high service level.

With some variation, there is a similarity in the range of programs and services available in the larger municipalities. Differences with services provided in Strathcona include the availability of a disabled adult transportation system in Fort McMurray, Red Deer and St. Albert. Red Deer also operates a municipal daycare and after-school care program. St. Albert does not administer a family day home program but provides assistance for an after-school care program. St. Albert and Red Deer are not involved with counselling services. Through intermunicipal agreements, Fort McMurray and Red Deer provide various family and community services to nearby areas.

TABLE 87

Family and Community Services Revenue and Expenditure Data, Comparison Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

		dollars per capita			dollars per $1000 EA
		Gross Expenditure	Operating Revenue	Net Expenditure	Net Expenditure
Airdrie		20.91	12.73	8.18	1.92
Fort Saskatchewan		13.95	14.22	-0.27	nil
Leduc		17.17	14.57	2.60	0.46
Fort McMurray		15.97	12.53	3.44	0.64
Grande Prairie		14.27	13.30	0.97	0.15
Red Deer		9.10	6.84	2.22	0.39
St. Albert		7.99	8.09	-0.10	nil
4C Average		11.38	9.66	1.72	0.30
County of Leduc		11.61	14.26	-2.65	nil
County of Strathcona	1981	14.16	9.74	4.42	0.44
	1982	14.98	13.11	1.88	0.18

Note: see footnote page 62 for explanation of revenue and expenditure data.
comparison municipalities excluded did not report any FCSS expenditures.

Source: Financial Statements; population and assessment used is from Appendix pages A-7 and A-8.

In general, of the larger municipalities under consideration, Strathcona and Fort McMurray rely on direct service delivery by their family and community services departments to a greater degree than Red Deer and St. Albert both of which rely extensively on local and district community service groups. This is particularly evident in the case of St. Albert where many service delivery functions have been taken over completely by such community service groups.

Of the rural municipalities that were compared with Strathcona, only the County of Leduc operates a family and community services department. The County of Leduc provides various services, largely on a direct basis, to its residents and to five urban municipalities within its boundaries. Through a joint use of counselling and homemaker services with the Town of Leduc, the county has been able to increase its capacity for the provision of family and community services.

It appears that Strathcona County residents are receiving a level of service somewhat above average in this particular area. Programming is extensive in range and comprehensive in coverage. In a service where expenditures tend to be closely conditioned by available provincial grants, Strathcona is notable for its apparent effort to go beyond this condition. In 1981, for example, per capita expenditures for the County were over $14.00 in comparison with a 4C average of about $11.00.

Strathcona is unique in relation to the cities in having to service a substantial rural population. It is known that a particular effort is made in this area despite the associated extra costs, so much so that while the service level for Sherwood Park and the County as a whole may be rated as about average, rural Strathcona residents are receiving an above average level of service in comparison with their counterparts in other rural municipalities.

Net service costs per capita, in the context of the county as a whole, are above those experienced in the cities sampled ($4.42 for Strathcona in 1981 in comparison with a 4C average of $1.72). Though this difference is explainable in part by the rural servicing, it is effectively the case that Sherwood Park residents, through their tax contributions, are incurring an above average level of costs for this service in comparison to their urban counterparts elsewhere. (Note however that the net expenditure in terms of dollars per $1000 EA drops significantly from 1981 to 1982.) It is also the case that the net costs in Strathcona might be reduced indirectly if there was a greater contribution by non-municipal bodies in tackling certain aspects of the service (as is accomplished in St. Albert, for instance).

Most rural municipalities do not provide family/community services, the Counties of Strathcona and Leduc tending to be exceptions. It is inevitable, therefore, that rural Strathcona residents incur above average tax costs for this service, the 'average' being almost nil costs in terms of general taxation.

Service satisfaction may be inferred from the Burton survey data, although in regard to this particular question there was a relatively high rate of non-response among all the categories of county residents. Of those who did respond it seems that both urban and rural respondents were fairly satisfied with the service provision, implying an average level of service satisfaction. The acreage component of the rural population might have reservations but these would only have a basis in comparison with urban situations, rather than with other rural municipalities where service provision is apt to be non-existent.

The service summary presented in Table 88 is strongly influenced by the use of 1981 net cost data. 1982 net costs, after discounting for capital items, were less than half the 1981 figure. The 1982 data are probably more representative of the current situation, given the new provincial grants system which accounts for much of the difference between 1981 and 1982 finances, particularly the reduction of net costs.

TABLE 88

Family and Community Services Evaluation

	Sherwood Park	Rural Strathcona	County as a whole
Level	Above Average	High	Above Average
Cost	Above Average	Above Average	Above Average
Satisfaction	Average	Average	Average
Efficiency	Average	Above Average	Average
Effectiveness	Average	Average	Average

Note: Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

In regard to rural/urban cost-benefit allocations, a very slight imbalance may be noted. Most of the services, and particularly the counselling services, are utilized more by Sherwood Park residents than rural residents simply because the department's offices are in the hamlet. Yet the net cost of the service is shared by all county taxpayers on the same basis.

On the other hand, the net costs are a very minor portion of the general tax bill, especially since 1982. As well, the county does make a special effort to enable rural residents to participate in the services provided.

N. AGRICULTURAL SERVICES

Agricultural Service Boards (ASBs) are municipal agencies providing services to the farming public in rural municipalities under provisions of the Agricultural Service Board Act. Presently there are 64 ASBs in Alberta each comprising three to seven members most of which are also members of the municipal council.

The administration of ASB programs is the responsibility of an appointed agricultural fieldman. The fieldman is also the municipal weed inspector under the Weed Control Act, the officer of the municipality under the Agricultural Pests Act and the soil conservation officer under the Soil Conservation Act. Alberta Agriculture pays for 50 per cent of the fieldman's salary.

A district agriculturist and a home economist, both of whom are Alberta Agriculture employees, work closely with the ASBs. In municipal districts the district agriculturist is a voting member of the ASB. In other rural jurisdictions he acts in an advisory capacity only.

The ASBs undertake a range of agricultural programs and rural services, the extent of which varies according to the needs and priorities of the rural community and the available funding. Some of the program costs are fully or partially covered by user fees or by Alberta Agriculture grants. It is up to the individual service boards to determine what portion of the costs, if any, are to be charged directly to the farmer.

ASB Services in Strathcona County

The ASB in the County of Strathcona encounters a rather different mix of needs and problems from that experienced in more conventional rural municipalities.

The county is of a relatively small size and it includes the urban concentration of Sherwood Park. More importantly in terms of ASB services, the county's rural population is comprised mainly of country-residential dwellers and small-holders with very few of the traditional farmers who predominate in other rural municipalities. It is estimated that there are presently only about 40 conventional, large-scale farms in the county almost all of which are concentrated in the relatively good agricultural land in the northern part of the county.[1]

Table 89 provides some data pertaining to the extent of farming in Strathcona and the comparison rural municipalities. Two aspects should be noted when examining that data.

Firstly, the definition of a farm unit includes what would more suitably be called hobby farms or rural small-holdings. Secondly, all the municipalities shown are adjacent to either Edmonton or Calgary. Their metropolitan location makes their farm units and population structure much different from that which would exist in most other rural jurisdictions in Alberta.

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[1] Two farming operations, one commercial and one corporate, are particularly extensive. They generate relatively few problems for and make few demands upon the ASB. Also, due to the January 1982 annexation about one-third of the county's agricultural land was lost to the City of Edmonton and the County of Leduc. The land lost was mainly prime arable land, leaving the county with an even greater predominance of poorer quality agricultural land.

TABLE 89

Agriculture Data, Comparison Rural Municipalities and Strathcona County, 1981 (and 1982 estimates for Strathcona)

	Total Farm Area (hectares)	Farm Area as a per cent of Total	Number of Farm Units[1]	Avg. Farm Size (hectares)	Farm Pop. as per cent of Total
County of Leduc	276,480	80	1,898	145	58
County of Parkland	217,300	58	1,350	160	18
MD of Foothills	335,230	91	1,162	290	41
MD of Rockyview	422,950	99	1,421	300	28
MD of Sturgeon	198,860	95	1,164	170	26
Strathcona County					
1981	110,750	76	1,053	100	7.4+
1982*	74,200	58	n.a.	n.a.	4.5+

Notes: one hectare is approximately 2.5 acres.

n.a. not available

* estimates only

+ percentages are 17 in 1981 and 12 in 1982 if Sherwood Park population excluded

[1] In 1981 a farm unit (i.e. a farm, ranch or other agricultural holding) is defined as one with sales during the past 12 months of $250 or more.

Source: 1981 Census of Agriculture for Alberta by Alberta Agriculture Statistics Branch, Nov. 1982.

Nevertheless, even in relation to the municipalities shown it is evident that in Strathcona County traditional agricultural activity is at a relatively low level and the average farm unit size is comparatively small.

It is the large number of small-holders and country-residential residents which generate most of the activity undertaken by the ASB. Much of the activity is regulatory in nature relating to the legislated duties (weed and pest control and soil conservation) which are assigned to all ASBs. The owners of small rural parcels are generally less able than traditional farmers to provide adequately for weed control and they are not usually well enough equipped to deal with animal problems.

Skunk and beaver problems are particularly prevalent in the county. That is due to the wooded and lake-dotted nature of the terrain and because the county is adjoined by large areas - Elk Island National Park and the Ministik game sanctuary - where these animals can thrive. It is also necessary for county roads in the heavily-travelled subdivision areas not to be blocked or flooded by beaver activity.

An additional demand placed on the ASB is wild game and weed control in over 300 vacant or partially vacant public reserve parcels set aside for residential subdivisions and in the fringe area of Sherwood Park.

Until the end of 1982 the Strathcona ASB was also responsible for a more general public grounds maintenance service which encompassed Sherwood Park. Much of these activities which included tree planting, roadside seeding and mowing and the maintenance of a tree nursery are now performed in the hamlet by the newly integrated parks and recreation department (see Section P page 288).

The Strathcona ASB until recently had also provided a retail service for agricultural chemicals and forage seeds. This service is now left to commercial enterprises.

Table 90 summarizes the various activities performed by the ASBs in Strathcona and the comparison rural municipalities. It is estimated by county staff that over three-quarters of the ASB time and effort is related to the small-holdings and country-residential subdivisions, primarily for weed and pest control and roadside maintenance. Activities related to Sherwood Park account for less than 10 per cent of the total while the traditional agriculture-related activities comprise the remaining 15 per cent.

Financial Analysis

The total gross expenditure on agricultural services in Strathcona was about $500,000 in 1981 and $229,000 in 1982 (figures discounted as per footnote page 62).

In 1981 the county ASB undertook extensive seeding projects within rural subdivisions. These expenditures are more appropriately considered land development costs rather than normal ASB services. In fact, a major portion of the cost was covered by funds from developers' agreements. Also, the 1981 expenditure includes services provided to the large area of agricultural lands lost to annexation in 1982.

TABLE 90

ASB Programs, Strathcona County and Comparison Rurals

(√ program undertaken; X program absent)

Types of Programs	Strathcona	Leduc	Parkland	Foothills	Rockyview	Sturgeon
Plant Industry Projects:						
Soil Conservation	√	√	√	√	√	√
Weed Control[1]	√	√	√	√	√	√
Crop Protection (spraying)	√	√	√	√	√	√
Beaver Control	√	X	√[7]	X	X	√
Skunk Control	√	√	X	X	X	X
Rural Beautification[2]	√	√	√	√	√	√
Roadside Maintenance[3]	√	√	√	√	√	√
Horticulture	√	√[6]	√[6]	X	X	X
Crop Demonstration Program	X	√	√	√	X	√
Soil Improvement[4]	X	√	X	X	X	X
Seed Cleaning	√	√	√	√	√	√
Animal Industry Projects:						
Warble Fly Control	√	√	√	√	√	√
Animal Auction Inspection[5]	X	√	√	X	√	X
Calf Care Program	X	X	X	√	X	X
Hoof Trimming	X	X	X	X	X	√
Cattle Scales supplied	√	X	X	X	√	X
Feed Buying	X	√	X	X	X	X
Extension Programs and Home Economics	√	√	√	√	√	√
Seed, Chemicals, etc. Retail Operations	X	X	√	X	X	√

Notes:
1 on public and private lands, including inspection.
2 tree planting and pruning.
3 backsloping, seeding and mowing.
4 acid soil liming, soil blending and deep plowing.
5 for diseases and parasites.
6 summer only in a joint Leduc/Parkland program.
7 an extensive program with no charge to farmers.

Source: Alberta Agriculture, Agricultural Services Branch.

As a consequence the 1982 data are more representative of normal expenditure levels. Even those, however, are likely to become quickly dated since the board was relieved at the end of 1982 of some maintenance functions which were transferred to the recreation and parks department.

Table 91 shows the expenditure and revenue details for both years.

TABLE 91

Agricultural Services Revenues and Expenditures,
Strathcona County 1981 and 1982

	1981		1982	
	$'s	$'s per cap.	$'s	$'s per cap.
Expenditure	500,612	23.50	228,746	12.60
Revenues				
Provincial Grants	68,818	3.25	96,248	5.30
Other Revenue	135,196	6.35	23,649	1.30
Total Revenue	204,014	9.60	119,897	6.60
Net Expenditure	296,598	13.90	108,849	6.00

Source: Financial Statements (data discounted as per footnote page 62).

The main revenue sources are provincial grants and user charges. (Note that in 1981 large amounts of revenue were from developer agreements.) Revenues cover about 40 per cent of 1981 costs and 52 per cent of 1982 costs. The 40 per cent increase in provincial grants from 1981 to 1982 is due to grant fund increases and the greater application by Strathcona for cost-sharing on rural services.

It is the policy of Alberta Agriculture to encourage programs which are the greatest benefit to the largest number of farms and to encourage maximum cost-recovery through user charges. This general policy, however, is not fully applicable in Strathcona because of the small number of conventional farms and because the main services provided by the ASB do not readily lend themselves to the levying of user charges.

For instance, 75 per cent of the beaver control problems occur in creek bends, drainage easements, county ditches and environmental or municipal reserve properties. The individual landowner therefore cannot usually be held responsible for the flooding. Similarly, old roadside backsloping cannot be assessed on a user charge basis since the general public gain benefits from improved sightlines and weed control, while the county itself gains due to less snowplowing and maintenance requirements.

Full cost-recovery could apply only to drainage ditch construction, tree shelter belts, weed control on private property and other programs from which a specific landowner would gain all of the benefits.

Public Opinions

The 1979 Burton survey did not address agricultural services. It perhaps would be possible to infer satisfaction levels from the responses to the question on general county management (see page 71) but that would require too many assumptions about what services were being considered by the respondents. Consequently, no public opinion ratings are presented for agricultural services in this report. That precludes any evaluation of service satisfaction levels or service cost-effectiveness.

Service Efficiency Comparisons

Table 92 presents some comparative data on agricultural services for Strathcona and the five comparison rural municipalities. Note that per capita data for Strathcona is based upon the rural population total only while the fiscal effort statistic is calculated using the assessment base of the entire county.

The comparisons of Strathcona with other rural municipalities require some qualification. The overall program profile for Strathcona appears quite similar to that for the other rurals (see Table 90 page 264) but in fact the vast majority of the Strathcona ASB services pertain to rural small holdings rather than large farms. The most comparable municipality in this regard is the County of Parkland where data from Table 89 (page 261) indicate a very low proportion of the population engaged in farming.

Also, the 1982 expenditure for Strathcona is more suitable for drawing comparisons than the 1981 data bacause of the unusual expenditure and revenues in 1981 for seeding in rural subdivisions.

In addition, notice that Table 92 presents a 4RM average which, through the exclusion of the unusually high expenditure and revenues for Sturgeon, presents a more comparable base.

The 1982 level of gross expenditure for Strathcona is only about three-quarters of the 4RM average. It is, however, quite similar to that of Parkland County. The actual type of services provided in Strathcona may be considered abnormal in relation to the more usual agricultural expenditures of other rural municipalities but, considering

TABLE 92

Agricultural Services Revenues and Expenditures, Comparison Rural Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

	dollars per capita			dollars per $1000 EA
	Gross Expenditure	Operating Revenue	Net Expenditure	Net Expenditure
County of Leduc	19.70	10.50	9.20	0.84
County of Parkland	13.25	8.45	4.80	0.40
MD of Foothills	13.65	7.00	6.65	0.66
MD of Rockyview	20.10	4.30	15.80	1.14
MD of Sturgeon	54.10	49.70	4.40	0.49
5RM Average	24.15	16.25	7.90	0.69
4RM Average*	16.30	7.50	8.80	0.73
Strathcona County 1981+	23.50	9.60	13.90	0.59
1982+	12.60	6.60	6.00	0.22

Note: see footnote page 62 for explanation of revenue and expenditure data.

* Sturgeon excluded.

+ per capita based on rural population only; per $1000 EA based on entire county assessment.

Source: Financial Statements. Population and Assessment from Appendix pages A-7 and A-8.

the nature of Strathcona County, the level of service provided can be assumed to be about average.

The service cost to taxpayers is reduced considerably by the operating revenues generated. Table 92 indicates the per capita level of operating revenues in Strathcona is quite near the more relevant 4RM average.

Further data on operating revenues are presented in Table 93. Provincial grants comprise a significant portion of the revenues for all the municipalities and the per capita level for Strathcona, in 1981 at least, is very similar to all the other rurals except the County of Leduc.[1]

The 'other revenue' category includes sales of goods and services, licences and fees and other minor items such as rentals. Strathcona's level of revenue in 1981 is distorted by monies received from developers to pay for rural subdivision seeding. The 1982 per capita level for the county is more relevant and it is comparatively low with the exception of the MD of Rockyview. As mentioned earlier, the services provided by the Strathcona ASB are less suitable for user charges than the more normal ASB services of other rural jurisdictions.[2]

Nevertheless, the percentage of expenditure covered by the operating revenues is more or less average in comparison with the 4RM.

The resulting level of net expenditure (see Table 92) shows Strathcona for 1982 being noticeably lower than the other municipalities,

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[1] It is expected that the sample rurals would show a similar increase in the grant level from 1981 to 1982 as that for Strathcona but the required data is not presently available.

[2] It should be noted that Parkland and Sturgeon provide a retail service for seeds and chemicals so they derive significantly more revenue than municipalities, such as Strathcona, that leave the retailing service to commercial enterprises.

TABLE 93

Agricultural Services Operating Revenues, Comparison Rural Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

	dollars per capita			Per Cent of Gross Expenditure
	Provincial Grants	Other Revenue	Total Revenue	Total Revenue
County of Leduc	8.25	2.25	10.50	53.2
County of Parkland	2.75	5.70	8.45	64.0
MD of Foothills	3.65	3.35	7.00	51.4
MD of Rockyview	3.35	0.95	4.30	21.5
MD of Sturgeon	3.25	46.45	49.70	91.8
5RM Average	3.85	12.40	16.25	67.3
4RM Average*	4.00	3.50	7.50	46.0
Strathcona County				
1981+	3.25	10.65	13.90	40.8
1982+	5.30	0.70	6.00	52.4

* Sturgeon excluded.

+ per capita based on rural population only.

Source: same as Table 92.

especially in regard to the fiscal effort statistic. The $0.22 per $1000 EA in Strathcona for 1982 is less than one-third of the 4RM average of $0.73. This factor, combined with the low revenue from user charges leads to a below average rating for service cost and consequently an above average rating for service efficiency (see Table 94).

The service is evaluated for rural Strathcona only since that is where 90 per cent of the expenditures take place. Also the 10 per cent of expenditure for Sherwood Park, involving public grounds and tree nursery maintenance, is to be taken over by the new recreation and parks department from 1983 on.

A slight rural/urban benefit-cost imbalance may be noted. Residents of Sherwood Park pay through general taxation the same as rural residents for the net cost of ASB services although almost all direct benefits of the service accrue to the rural area. This imbalance is minor in terms of the small burden that agricultural services place upon the property tax base.

Nevertheless the county could examine methods of increasing the proportion of the service costs covered by user charges perhaps to a level nearer the average for the comparison rural municipalities. It is acknowledged, however, that the ability to implement user charges is limited because of the unusual nature of the main demands faced by the Strathcona ASB.

TABLE 94

Agricultural Services Evaluation
Rural Areas Only

	Rural Strathcona
Level	Average
Cost	Below Average
Efficiency	Above Average

Note: Satisfaction and Effectiveness ratings excluded due to absence of public opinion data.

Possible ratings are:
- Very High
- High
- Above Average
- Average
- Below Average
- Low
- Very Low

O. PLANNING SERVICES

Planning services in the County of Strathcona have been provided through a combination of methods including the county's own resources, the Edmonton Metropolitan Regional Planning Commission (ERMPC) and the use of private consultants. The provision of planning services is presently undergoing a major review and significant changes are anticipated in the near future.

Presently, the county has its own development and planning branch within its general administration structure. The branch consists of a staff of five persons who are responsible for operating the municipal planning commission, overseeing the implementation of the land-use bylaw, processing development permits and administrating the county's dealings with subdivision developers.

A portion of the expenses associated with the development and planning branch is covered by a recently introduced schedule of charges for processing development permits. As well, one-third of the administration fee levied on developers by the county is allocated to the branch. (The other two-thirds goes to the engineering branch.)

The county has been utilizing the planning advisory services of the EMRPC for some small planning projects and for day-to-day operational guidance. The EMRPC also is used as the subdivision approving authority within Strathcona County.[1]

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[1] The EMRPC was formed in conjunction with the January 1982 annexation decision. Prior to that the County of Strathcona was a member of the Edmonton Regional Planning Commission.

Strathcona contributes to the cost of the planning commission services through the provincially-levied Planning Fund Requisition. This requisition is examined later under the 'Financial Analysis' heading.

Private planning consultants have been used by the county to augment its own services and those of the regional planning commission. Prior to 1980, the county employed a consultant on a basic retainer fee plus extra charges for major planning projects such as the preparation of the county's general plan and land-use bylaw. Since that time, the trend has been for more work to be done by county or regional planning commission staff.

The extent of planning services can increase sharply above normal levels when major projects are undertaken. (In the past these have required the use of private consultants or special staff contract arrangements.) Strathcona County is likely to encounter such special expenditures in the near future since its general plan and land-use bylaw, which came into effect in 1979, are due for a review within the next year or two. Such a review will be necessary especially once the new Metropolitan Regional Plan being prepared by the EMRPC is approved.

With such major projects in mind and in conjunction with its overall administrative re-alignment, the County of Strathcona is currently undertaking a major upgrading of its own planning capabilities. The county intends to gradually eliminate the need for EMRPC services in relation to municipal planning projects and to undertake such work with its own staff. A Director of Planning is to be hired in 1983 and there is provision for an additional planning technician in 1984/85. As well, once a director is appointed the county intends to apply to become its own subdivision approving authority.

Financial Analysis

Table 95 shows the planning services expenditures and revenues of Strathcona County for 1981 and 1982. The expenditures are essentially the costs associated with the development and planning branch and the Planning Fund Requisition. The revenues are primarily the one-third share of the administration fee levied by the county on subdivision developers. Another minor revenue item is the sale of reports which are priced at a break-even basis.

Notice that for 1982 it has been possible to separate the cost of the municipal planning commission from the development and planning service expenses. In both years, the implementation of the land-use bylaw and related matters led to specific advertising expenditures. The reduction in those costs, along with the general effects of annexation, largely explains the small decline in expenditures from 1981 to 1982.

It should be acknowledged that some of the consulting expenses borne under general government possibly should be credited as planning-related expenditures. However, in recent years such consulting projects have been concerned with general corporate or fiscal planning, or with economic development and annexation-related matters, which clearly affect the operation of the county in general rather than being of a land-use

TABLE 95

Planning Services Expenditures and Revenues, Strathcona County 1981 and 1982

	in dollars	
	1981	1982
Development and Planning Branch	152,858	132,378
Municipal Planning Commission	(included above)	25,110
Land-Use Bylaw (Advertising)	9,712	3,103
Sub-Total	162,570	160,591
Planning Fund Requisition	172,177	169,137
TOTAL EXPENDITURE	334,747	329,728
TOTAL REVENUES	12,275	23,403
NET EXPENDITURE	322,472	306,325

Source: Strathcona County 1981 and 1982 Trial Balances.
Alberta Planning Board.

planning nature. It does not therefore appear justifiable to allow for significant consulting expenses as part of the Strathcona planning service for 1981 and 1982. The sums involved for planning consulting would probably amount to less than 5 per cent of the total planning-related expenditures indicated in Table 95.

The amount of the Planning Fund requisition is determined by a provincially-set mill rate applied against the municipality's equalized assessment. For both 1981 and 1982 the mill rate was 0.345 for rural municipalities (including Strathcona County) and 0.750 for urban municipalities.[1]

The planning requisition accounts for slightly more than one-half of the total expenditure in both years. Revenues covered only a very minor portion of the expenditure (3.7 per cent in 1981 and 7.1 per cent in 1982).

Public Opinions

Although the available public opinion poll data have not included planning as a separate service it may be considered as part of the all-embracing category of county management in general. In these terms, the Burton data (1979) indicate that 55 per cent of the residents of the county were 'satisfied' or 'very satisfied' with county management while only 11 per cent were 'dissatisfied' or 'very dissatisfied.' For further details see page 71 and Appendix III pages A-51 and A-57.

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[1] Lower mill rates are imposed in those municipalities which have their own planning department and/or which are their own subdivision approving authority. Also, in 1983 there was a general 25 per cent reduction in the mill rate (to 0.259 in the case of Strathcona).

Service Efficiency and Effectiveness Comparisons

In comparing the range, quality and cost of planning services in Strathcona County with other municipalities it is necessary first to consider the variations in the methods used to provide the service and in the financial accounting.

Most municipalities in Alberta are members of a regional planning commission (RPC) with voting representatives usually being members of the municipal council. Regional planning is a form of inter-municipal planning and an aspect of provincial-municipal planning. As well the RPCs function as the subdivision approving authority for most municipalities.

In some cases, however, municipalities have been granted the authority to approve subdivisions within their boundaries. Of the comparison municipalities, the County of Parkland since 1981 and the City of St. Albert since 1980 have been granted this authority.[1]

The municipalities which are their own subdivision approving authority are levied a reduced planning fund requisition mill rate. For example, St. Albert was levied a rate of 0.058 mills in 1981 and 1982 rather than the normal 0.750 mills for urban municipalities while Parkland County was levied 0.230 mills in the same years rather than the normal

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[1] All the other comparison municipalities, except Fort McMurray, used their RPC as the subdivision approving authority in 1981 and 1982. Fort McMurray is not within the jurisdiction of an RPC so the Provincial Government acted as the approving authority. In 1983 several of the comparison municipalities applied for and received approval to become their own approving authorities. These include the Town of Fort Saskatchewan (granted 1 April 1983), the County of Grande Prairie (1 April 1983), the City of Fort McMurray (granted 1 June 1983), the Town of Airdrie (1 June 1983) and the MD of Rocky View (not approved as yet). Note that one of the major requirements to receive subdivision approving authority is that the municipality must have an approved general plan.

0.345 mills for rural municipalities. Those municipalities processing their own subdivision applications would also receive the revenues from charges and fees that are normally imposed.

The amount of the requisition mill rate reduction is increased if the municipality has its own planning department to provide municipal planning services rather than using the services of the RPC. Major cities long have had their own departments and in recent years it has become quite common as well for smaller urban municipalities and some rural ones to establish municipal planning departments (including, from the comparison municipalities, St. Albert, Leduc, Spruce Grove, Airdrie, Parkland County and the MD of Rockyview).

In contrast, the use of private consultants has declined in the past few years. Of the comparison municipalities, consultant expenses are significant only for Fort McMurray and Grande Prairie.

A planning activity which is now mandatory for all municipalities is the implementation of a land-use bylaw. The bylaw replaces former provisions for development control and/or land-use zoning. Every municipality has someone on staff employed to enforce the land-use bylaw. The position may be part of a planning department or, more commonly, part of a larger department which also handles building inspections, bylaw enforcement, licensing, economic development, etc.

As a consequence, financial comparisons of planning expenditures and revenues are difficult. For Strathcona County it has been possible to isolate the planning data from the general administration function in which it is accounted (see Table 95 page 276). But for the comparison municipalities such a procedure has not been possible.

For example, under the financial statement heading of 'municipal planning, zoning and development,' the cities of Red Deer and Grande Prairie and the County of Leduc show no revenue or expenditure while other municipalities show data which apparently include activities other than those which are strictly planning related.

The only expenditure item which is strictly comparable among the municipalities is the Provincial Planning Fund (PPF) requisition. The mill rate imposed to generate the requisition in 1981 and 1982 was standard throughout the comparison municipalities (at 0.345 for rurals and 0.750 for urbans) except for Parkland County and St. Albert which received a reduction because of their subdivision approving status.

The PPF requisition levied in Strathcona for 1981 amounted to $3.44 per capita. That is almost identical to the 5RM average of $3.48 per capita and the 4C average of $3.41.

In the absence of the type of comparable data used for other services examined in this report, the normal service evaluation is not presented for the planning service. Instead it is considered more worthwhile to examine the planning service operations of a few individual municipalities in order to anticipate what Strathcona County is likely to expect in the way of expenditure as it proceeds to establish its own planning department. Table 96 presents the information discussed below.

In 1982 the planning staff for the MD of Rockyview was comprised of four professionals and two clerks. That for the County of Parkland, which included the building inspection function, was five professionals,

TABLE 96

Planning Services Staff Numbers and Revenue and Expenditure Data, Selected Municipalities and Strathcona County 1982

		dollars per capita					dollars per $1000 EA
	Staff Number	Operating Expenditure	Revenues	Net Oper. Expenditure	PPF Requisition	TOTAL NET EXPENDITURE	TOTAL NET EXPENDITURE
MD of Rockyview	6	15.07	2.04	13.03	6.39	19.42	1.05
County of Parkland	8.5	11.96	5.30	6.66	3.33	9.99	0.69
City of St. Albert	7	9.25	1.70	7.55	0.35	7.90	1.31
City of Ft. McMurray*	11	n.av.	n.av.	11.90	2.80	14.70	2.60
City of Red Deer+	n.a.	n.av.	n.av.	2.06	4.84	6.90	1.07
City of Grande Prairie	n.a.	n.av.	n.av.	3.09	5.99	9.08	1.14
Strathcona County	5	3.35	0.49	2.86	3.53	6.39	0.62

n.av. not available
n.a. not applicable (use RPC services extensively)
* based on 1983 budget estimates
+ based on estimates from municipal officials

Source: Financial Statements and discussions with municipal officials.
1982 population and equalized assessment used is from Appendix pages A-7 and A-8.

three clerical and one shared receptionist. St. Albert's staff of seven was reduced from the 1981 level of eleven while the Fort McMurray staff of eleven was hired in late 1982. The five staff members credited for Strathcona pertain to the development and planning branch, rather than to a separate planning department as for the other municipalities.

Note that the per capita operating expenditure for the municipal planning service in Strathcona is only 20 to 30 per cent of the level in Rockyview, Parkland and St. Albert. That is because the current Strathcona operation is primarily concerned with development control rather than a full planning service.

The expenditure of nearly $12 per capita for Parkland includes the building inspection service. But notice that the revenues are in excess of $5 per capita compared to about $2 for Rockyview and St. Albert and less than $0.50 for Strathcona. The revenues for Parkland include building permits which more than cover the cost of the building inspection service. Also included are subdivision fees and a municipal service charge levy of $500 per parcel on residential subdivisions (excluding reserves and the first parcel in each quarter section) and $500 per gross acre for industrial subdivisions.

That charge is comparable to the development administration fee levied in Strathcona, one-third of which is credited to the planning service. But in Strathcona the fee is only $100 per new residential parcel and $100 per net acre for industrial subdivisions.

The per capita net operating expenditure show Strathcona at a level quite similar to Red Deer and Grande Prairie. Those two cities extensively use their RPC services rather than their own planning staff. The per capita net operating expenditure of the four municipalities with their own planning departments average more than three times the level for Strathcona.

The PPF requisition accounts for well over 50 per cent of the total expenditure for Red Deer, Grande Prairie and Strathcona. On the other hand, it accounts for very little in St. Albert which is levied a very low requisition mill rate (0.058 rather than the normal 0.750 for urbans).

In comparison with Red Deer and Grande Prairie, the requisition level for Strathcona reflects the benefits from the lower mill rate for rural municipalities (even though the majority of its population is urban). At the same time though, it is unlikely that the county is able to receive as much service from its RPC as is the case for Red Deer and Grande Prairie. Those centres loom large in their respective regions while Strathcona has to compete for attention with several large urban and rural municipalities on Edmonton's metropolitan fringe. In the past the county has had to make up this deficiency by resorting to private planning consultants. In the future it appears to be council's intention to have such work done by its own planning staff.

On the basis of the data presented in Table 96, it appears that Strathcona could anticipate that a full planning service would cost in the range of $8 to $15 per capita, depending upon a variety of outcomes.

Because of Strathcona's unique structure it is difficult to estimate reasonable staffing levels. If for instance the combination of Rockyview and St. Albert was used as a guide then a total staff complement of 13 would be indicated. This contrasts with the current Strathcona staffing level of five persons. A greater than doubling of staff would certainly push service costs to the top end of the range mentioned earlier.

It must be presumed, however, that considerable economies of scale and general system efficiencies would stem from an integrated urban/rural operation. Therefore perhaps only two or three additional professional staff would be required to mount a full planning service. This lower level of additional staffing would increase service costs above present levels but only as far as the low end of the $8 to $15 per capita range. Those increased costs would be tolerable if they were to reduce the need for future special consulting expenditures and if they resulted in higher service levels than are currently obtainable from the EMRPC.

Should the county increase its planning staff sufficiently, and should it receive subdivision approving authority then it would qualify for a PPF requisition rate of only 0.087 mills under the 1983 policies. The resulting savings would go a long way to meeting the expenses of additional staff.

Also, the planning service costs in Strathcona should be kept down by the recent introduction of a modest fee schedule for development applications and approvals. The county could generate about $55,000 per year using the 1982 St. Albert/Rockyview combination as a guide. As well, the development administration fee, which is currently only one-fifth the level of the similar charge in Parkland, is under review.

If subdivision approving authority is granted revenues may be anticipated. For example, in Parkland and St. Albert, fees are charged at both the application and approval stages:

Subdivision Fees

County of Parkland	Application Stage	Approval Stage
Single Parcel Residential	$10	$20
Industrial or Commercial	$50 per parcel	$100 per parcel
Other	$25 per parcel	$50 per parcel

City of St. Albert	Application	Approval
Single Family Residential	$40	$40
Multiple Family	$175 per lot	$175 per lot
Commercial:		
less than 1 acre	$175	$175
more than 1 acre	$300	$300
Industrial:		
less than 1 acre	$50	$50
more than 1 acre	$90	$90

Other possible miscellaneous sources of fee revenue applying to subdivision and development situations are renewals, reclassifications, development appeals and land use conformance certificates.

While it is justifiable to expect some variation in costs according to the manner in which the planning service is provided, there is no apparent justification to expect variations in the quality of service. Regardless of the mode of servicing, the professionals involved are usually accredited by, or eligible for accreditation by, the Canadian Institute of Planners. There is therefore no particular reason to assume that one system or the other will produce a higher quality of technical planning work.

However, a municipality operating its own planning service has some advantages in more closely integrating land-use planning with other municipal activities. For subdivisions approval there would be an advantage in terms of ease of access for the applicant if the county, rather than an Edmonton-based body, were responsible. But offsetting net expenses would be involved which would be a charge on general taxation.

The current planning service in Strathcona results in a total net expenditure which translates into $0.62 per $1000 EA (see Table 96). Roughly a doubling of this fiscal effort would occur if the future planning services in Strathcona result in a per capita total net expenditure midway in the $8 to $15 range cited earlier.

Planning services in Strathcona benefit both urban and rural populations about equally. The services generate charges against general taxation of just over $300,000 per annum. Because of the urban nature of Strathcona, it is expected that there are significant economies in operation realized, especially in terms of staff and administration costs.

In per capita terms, service costs are comparatively low at present although the service provided to date is very basic. A more comprehensive service, including subdivision approvals, would minimize the need for periodic private consulting advice and would afford a more direct servicing of municipal planning needs. This could be provided without an excessive increase in the tax burden if there is only a small increase in professional planning staff (perhaps two or three persons) and if the county receives subdivision approving authority (which would result in a significant requisition mill rate reduction). There is also potential of increasing the revenues from planning-related fees and charges.

P. RECREATION AND PARKS

The recreation and parks service in Strathcona County has undergone a major change as of January 1983. Prior to that date recreation services had been provided by two main Recreation Boards - one for Sherwood Park (Rec. Area 1 or 'Sherwood Park Recreation') and one for the remaining rural area (Rec. Area 2 or 'Strathcona Recreation and Parks'). The two boards now have been integrated into a single Recreation and Parks department.

The elimination of the two-board situation was undertaken to resolve several problematic issues which had arisen. These included a confused image in the eyes of the general public, inconsistent budgeting and pricing, duplication of services, unequal access according to area of residency, and contrasting fiscal policies for facility and park operations.[1]

The discussion in this section deals with information from 1981 and 1982. However, while there are some differences in revenue and expenditure patterns between the former two recreation areas, no glaring inequities exist. This is likely due to the de facto integration of services which has been pursued for the past three or four years.[2]

Both recreation areas developed an impressive array of services which compared very well with their respective urban and rural counterparts elsewhere in Alberta. The services included a mix of facilities and programming with facility complexes being the main emphasis in both areas.[1]

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[1] County of Strathcona Management Plan November 1982.

[2] In fact, integration has been considered ever since the separate rural recreation area was formed in 1973. The Sherwood Park recreation area was formed in 1968.

Sherwood Park residents are served by a two-arena sports centre, a smaller recreation centre, a major recreation complex, a community centre, a cultural heritage centre and several smaller special-purpose, culturally-oriented facilities. In addition the county swimming pool is located in Sherwood Park.

In the rural part of the county there are three major 'regional' recreation complexes at Ardrossan (Recreation Complex), Fultonvale (Strathcona Olympiette Centre) and Josephburg (Moyer Recreation Centre). There is also a major county-wide park area (RCMP Centennial Park/Strathcona Wilderness Centre).

Many other smaller facilities in the rural area are owned and operated by numerous community leagues and local organizations. Much of the programming work of the previous rural recreation area was in support of these community efforts. The board actively encouraged self-help attitudes by matching grant incentive schemes, leadership development efforts, and community league extension work.

By contrast, the Sherwood Park recreation programming was more direct with departmental staff playing a more prominent role. There is as yet no comparable network of community groups in the urban area with which the new department might share the programming load, although there are signs that such groups will now be nurtured in the Sherwood Park context.

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[1] Sherwood Park Five-Year Parks and Recreation Master Plan by W.J. Frank and Associates, 1980; and Rec. Area No. 2 - County of Strathcona Parks and Recreation Master Plan 1980-1985 by R. Conrad, November 1979.

Another important contrast between the two areas in the past has been the much higher priority accorded to formal parks-based recreation in the Sherwood Park area. Nevertheless, in recent years major efforts have been made in both recreation areas to expand and improve parks facilities, so much so that such expenditures have been unusually prominent.

The newly-formed Recreation and Parks Board is balanced in terms of urban and rural representation. While it is expected that recreation priorities may vary somewhat between the urban and rural components of the county, it is also expected that the combined department will be able to provide services for the benefit of all county residents and in a manner which eliminates duplication of efforts and reduces administrative overhead costs.[1]

Financial Analysis

The provision of recreation services in Strathcona County involves a particularly high expenditure level but net costs are surprisingly low due to high levels of revenue generated.

From the trial balance data of 1981 and 1982 and from the 1983 budget it is possible to examine the revenues and expenditures for the former two recreation areas and for the integrated operation of 1983. Some differences and similarities in the services for the rural and urban areas are noticeable and the anticipated future pattern for the integrated operation is indicated by the 1983 data.

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[1] Note that the new Recreation and Parks Department has assumed responsibility for some public area maintenance and the tree nursery operation which were formerly undertaken by the Strathcona Agricultural Service Board. See page 262.

Expenditures

Table 97 shows the relative importance, in per capita and percentage terms of the four main service areas of central services, facilities, programs and parks.

Percentage of Expenditure: From the 'A' section of Table 97 it is apparent that 1982 was something of a transitional year with the decision to integrate the two recreation areas being actively anticipated. The degree of change is particularly marked in the case of the rural service.

1981 and 1982 are characterised by unusually extensive park development in both recreation areas which has distorted the patterns somewhat. The 1983 budget breakdown relating to this item is therefore probably more representative in this respect. Note that 'facilities' will account for an even greater proportion of total expenditures (in excess of 60 per cent) than has been the case in the past. (Apparently, the large allocation has been necessitated by the huge increases in utility costs.)

Possibly as a result of some of the economies associated with integration, 'central services' is budgeted to comprise a slightly lower proportion of total resources. Program funds are being increased somewhat but this simply reflects the fact that much of the programming effort of the rural board - now being assumed by the integrated operation - was previously accounted for under the central services heading.

If the 1983 budget can be interpreted as an indication of some of the trade-offs involved in the integration process, it seems that

TABLE 97

County of Strathcona Recreation Services Area/Program Contrasts, Expenditure Analysis 1981, 1982 and 1983

		A. Percentage of Total Expenditures			B. $ Per Capita Expenditures		
		#1 (Sh. Pk.)	#2 (Rural)	Total	#1 (Sh. Pk.)	#2 (Rural)	Total
Central Services (including 'Grants' and S.T.E.P.)	1981	8.0	18.4	11.8	10.4	18.5	13.9
	1982	9.4	24.9	14.3	11.8	23.4	16.2
	1983			8.2			8.2
Facilities (including cultural facilities)	1981	45.9	42.3	44.6	59.6	42.5	52.3
	1982	49.9	51.2	50.3	62.6	48.1	57.1
	1983			63.2			63.0
Programs	1981	8.5	13.4	10.3	11.1	13.5	12.1
	1982	8.9	8.9	8.9	11.1	8.4	10.1
	1983			15.1			15.1
Parks	1981	37.5	25.9	33.3	48.7	26.1	39.1
	1982	31.7	15.0	26.5	39.8	14.1	30.0
	1983			13.4			13.3
TOTALS	1981	100	100	100	129.8	100.7	117.4
	1982	100	100	100	125.4	93.9	113.4
	1983			100			99.6

Populations:	1981	1982	1983
#1	28,798	29,764	-
#2	21,281	18,185	-
Total	50,079	47,949	49,000 (est.)

Sources: 1981 and 1982 Trial Balance Breakdowns; 1983 Budget Proposal.

'central services' will be discharged more in the manner of the previous urban operation, while 'parks' and 'programs' seem to reflect previous rural preferences for somewhat less in the way of formal parks-based activity and for more programming geared to helping people help themselves for their recreation needs.

Per Capita Expenditures: The urban service involved a much higher level of per capita expenditures than the rural service. The lower rural level might be associated in part with the emphasis on indirect programming (which is reflected by the particular rural effort under the 'central services' and 'programs' headings). The rural area also accorded a lower priority to parks expenditures on a per capita basis.

The urban area is associated with much higher per capita expenditures for facilities. In the rural context many facilities are owned and operated by community organizations which function as mini-recreation agencies in their own right but their expenditures do not enter into the county's accounting. The major facility expenses in the rural area are the three regional centres. These are relatively new and very expensive facilities in comparison to traditional rural recreation facilities. Their growing prominence in expenditure terms recently has led to a convergence of the expenditure patterns of the two recreation areas.

The rural per capita statistics for 1982 are particularly sensitive to the consequences of annexation which involved a net loss of around 3100 people. This translates into a 15 per cent population decline between 1981 and 1982 and a 20 per cent decrease in expenditures for the rural recreation area over the same period.[1]

It might be noted that the trend in recent years has been to reduce expenditures on the recreation service. The 1983 data indicate that there will be a particularly marked decline in per capita terms. One implication may be that in the future, for the service as a whole, a greater role will be played by voluntary self-help groups, as has historically been the case in the rural area.

Revenues

Table 98 presents data relating to the sources of revenue for financing recreation services.

Provincial Grants: A small proportion (around 6 per cent) of total service expenditures is offset by grants from the provincial government. The grants tend to be applied against expenditures for central services and/or programs. They are usually provided on a per capita basis with no distinction being made by the province between urban and rural municipal situations. There is no significant difference between the two recreation areas in the proportion of revenues accounted for by grants (although each Board tended to deploy these funds in different ways).

There is also a hidden grants contribution in respect to major facility development. Capital grants, or interest subsidization measures,

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[1] There is also the more general consideration that a large portion of the rural population in the immediate environs of Sherwood Park would tend to use the hamlet's facilities rather than the facilities at Fultonvale and Ardrossan. If this was the case and adjustments were made in the population denominators, then the contrasts between the two areas would diminish somewhat.

TABLE 98

County of Strathcona Recreation Services: Area/Program Contrasts - Revenue Analysis 1981, 1982 and 1983

		A. Percentage of Total Revenues									B. $ Per Capita 'Other' Revenues			C. Recovery Rates ('other' revenues as a % of total expend.)		
		#1			#2			TOTAL								
		Taxes %	Grants %	Other %	Taxes %	Grants %	Other %	Taxes %	Grants %	Other %	#1 $	#2 $	TOTAL $	#1 %	#2 %	TOTAL %
Central Services																
	1981	83.1	9.3	7.6	69.9	25.3	4.8	75.9	18.0	6.1	1.0	1.0	1.0	9.2	5.2	6.9
	1982	68.5	19.6	11.8	72.2	23.6	4.3	70.6	21.9	7.6	1.5	1.2	1.3	12.5	4.8	8.3
	1983							84.8	14.5	0.7			0.1			0.7
Facilities																
	1981	33.0	3.0	63.7	29.3	0	70.7	31.7	2.0	66.0	37.3	28.0	33.4	62.6	65.8	63.7
	1982				45.1	0	54.9	40.5	1.9	57.6	38.6	27.0	34.2	61.7	56.2	60.0
	1983							39.3	0.4	60.3			38.0			60.0
Programs	1981	3.0	39.3	58.4	75.2	3.3	21.5	37.6	22.1	40.7	6.5	3.0	5.0	58.7	22.0	41.3
	1982	5.3	36.5	58.3	46.7	3.7	49.6	18.6	25.9	55.5	7.1	4.7	6.2	63.5	56.1	61.1
	1983							27.1	34.6	38.3			5.8			38.3
Parks	1981	35.1	0.5	64.4	24.5	0	75.5	32.1	0.3	67.6	32.3	20.5	27.3	66.3	78.4	69.7
	1982	44.1	1.3	54.6	74.0	0.5	25.5	49.5	1.1	49.3	21.8	3.7	14.9	54.8	26.2	49.7
	1983							91.9	5.4	2.7			0.4			2.7
TOTALS	1981	36.0	5.7	58.2	42.5	5.5	52.0	38.3	5.6	56.0	77.1	52.4	66.7	59.4	52.0	56.7
	1982				56.6	6.6	36.8	45.3	6.9	47.8	69.0	36.5	56.7	55.0	38.9	50.0
	1983							48.2	6.7	45.0			44.8			45.0

Note: #1 is Sherwood Park recreation area. #2 is the rural recreation area.

Source: 1981 and 1982 Trial Balance Breakdowns; and 1983 Budget Proposal.

have effectively reduced the debt service charges incorporated in the operating expenditures for major recreation facilities. These have mainly been of significance for the Sherwood Park recreation area.

User Charges: The major revenue source for both areas has tended to be charges for facility users or program participants. The recent trend, however, has been in the direction of decreasing contributions from such sources, and in fact for the rural recreation area in 1982 the major revenue source was the general tax allocation rather than user charges as in 1981.

The category of 'other' revenues presented in Table 98 also includes inter-fund transfers from various reserves and allowances. These are especially important in the case of parks-related revenues in 1981 and 1982. The 1983 budget data is indicative of a more representative revenue breakdown for the parks component of the total service.

The main service sources of 'other' revenue are facilities and programs. The associated charges and fees have been progressively standardized between the two areas over the past few years. Earlier there were wide discrepancies and many inconsistencies in relation to pricing policies and fiscal policies in general. These have now been almost entirely eliminated although some would still have existed in 1981 and 1982. As a general rule the rural service tended to subsidize facility and program costs more heavily, whereas the urban service attempted to operate on a break-even basis.

Departures from this principle were reflected in the internal tax allocations made by each board. These in turn reflected specific policies in relation to facility/program operation and the associated fees or charges. Essentially, particular user groups could be favoured, to various extents, with the costs incurred being met by the general taxpayer rather than other users.

In general, per capita revenue from 'other' sources (i.e. non-tax and non-grants revenue) was much higher in the case of the urban service in comparison to the rural one (see section B of Table 98). The contrast was particularly sharp in 1982.

It will be recalled that the urban service per capita expenditures are much higher than the rural service. A more meaningful comparison of the two services is therefore the crude recovery rate, that is, non-tax and non-grants revenues as a percentage of total expenditures (see section C of Table 98).

In general the urban service has had the higher recovery rate, especially in 1982, although there is some variation in respect of each service component. The totals may also be unduly affected by the extraordinary level of capital activity associated with park development in 1981 and 1982. Note that the 1983 budget anticipates a continuing decline in the recovery rate for the service as a whole, increasing the reliance on general taxation.

Taxes: In recent years a steadily increasing proportion of service expenditures has had to be covered out of general taxation (Section A Table 98). This follows a long period in the last decade when taxation accounted for a decreasing proportion of service revenues (see Master Plans).

In percentage terms the rural service has had to rely on general tax revenues to a greater extent than the urban service. This may be a reflection of the manner in which the service was financed from 1973 until 1981 when contributions towards recreation from general taxation were based on a standard mill rate. While the mill rate was the same for each recreation area the assessments on which it was levied varied greatly. Recreation Area No. 1 received funds on the basis of Sherwood Park assessment only with Area No. 2 funds being based on the remaining county assessment including the industrial assessment of 'Refinery Row.' Hence the same mill rate yielded around three times more tax revenues for the rural service compared with the urban service.

The rural board was therefore able to maintain low user charges and to tolerate relatively large deficits on programs or facilities. The urban board by contrast was forced to maximize user charge revenues and to adhere much more closely to the break-even principle. For a time the consequence was wide disparities between the two boards in the prices charged for comparable programs or facilities.

The mill rate basis for the tax allocations to each service was dropped in 1981 in favour of a zero-based budget approach. This involved each board justifying a straight dollar amount and seeking council approval for the sums in question. In 1982 each board was provided with much tighter guidelines, the effect of which was to demand a much closer adherence to the break-even principle on the part of both boards.

The consequences of this change were particularly marked in the case of the rural service. Although charges are now standardized across the whole county it is the rural customers which have experienced the greater increase in rates, thus bringing them more into line with what has historically been the case for Sherwood Park customers.

Although it appears in percentage terms that the rural service, has had to rely on general taxation to a greater extent than the urban service, in per capita terms the two services are more on a par with one another (see Table 99 page 300).

For instance, in 1981 the urban service received a higher level of per capita tax allocations but the situation was reversed in the following year. In each case the monetary differences amounted to only $60,000 to $70,000 which is almost negligible in relation to total service expenditures. It is clear therefore that a fair degree of informal integration of the two services had taken place in the years immediately proceeding the formal integration of January 1983.[1]

Tax allocations per capita provide a good general indicator of net expenditure. Since both services registered small net gains in both years a more precise indication of service costs may be obtained by deducting these gains from the tax allocations (see Section C Table 99). This adjustment serves to further reduce the already minimal differences between the two services. On a cost basis therefore there are no obvious grounds for presuming that the urban residents are subsidizing the rural residents or vice versa.

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[1] This is underlined by a 1979 comparison which indicates that Recreation Area No. 1 was then receiving only $15.50 per capita tax revenues while the rural service was receiving $36.70 (computed from Master Plan data). The discrepancy would probably have been even greater earlier on in the decade.

TABLE 99

County of Strathcona Recreation Services: Area/Program Contrasts; Net Cost Indicators 1981 and 1982 and totals for 1983

A. Tax Allocations Per Capita

		#1	#2	Total
Central Services (incl. Grants & STEP)	1981	10.4	14.2	12.0
	1982	8.6	18.9	12.5
Facilities (incl. Cult. Facilities)	1981	19.3	11.6	16.0
	1982	25.2	22.2	24.1
Programs	1981	0.3	10.4	4.6
	1982	0.6	4.4	2.1
Parks	1981	17.6	6.7	13.0
	1982	17.6	10.7	15.0
TOTALS	1981	47.6	42.8	45.6
	1982	52.1	56.3	53.7
	1983			48.0

B. Net Gains Per Capita (Totals only)[1]

	#1	#2	Total
1981	2.6	0.1	1.5
1982	4.9	5.5	5.1
1983			-

C. Net Service Costs Per Capita[2]

	#1	#2	Total
1981	45.0	42.7	44.1
1982	47.2	50.8	48.6
1983			48.0

Note: 1 Refers to tax allocations in excess of actual requirements.
2 Is the actual tax burden which resulted.

Source: same as Table 98.

Further evidence in that regard is indicated by the net expenditures in 1981 and 1982. Of the $2.1 million 1981 net expenditure, 63 per cent is attributable to Sherwood Park. In 1982 Sherwood Park accounts for 70 per cent of the $1.35 million net expenditure. Those percentages are quite close to the actual population distribution between the hamlet and the rest of the county, especially when it is considered that rural residents living nearby Sherwood Park would be using the hamlet facilities and programs.

Public Opinions

There is every indication that the vast majority of county residents - urban and rural - are well satisfied with the recreation service. According to the Burton study data (see Appendix pages A-55 and A-62) a majority of each lifestyle category rated the parks/recreation service as 'good,' with a substantial proportion of the remainder rating it as average. Overall, only a very small minority (6.4 per cent) rated it as bad.

Although satisfaction was general, the rural subdivision residents were least inclined to rate the service as good and most inclined to rate it as bad. The urban residents were most inclined to give a 'good' rating, while the traditional rural residents were the least inclined to give a 'bad' rating and the most inclined to give an 'average' rating. A comparatively high response rate on this particular question is also indicative of the popularity and general applicability of the service.

The general trends identified above also apply to the electoral division data. The division registering least satisfaction and the lowest response rate is the one which has since been annexed. The highest levels of satisfaction are consistently recorded for the Sherwood Park divisions. The only other feature worthy of note is the comparatively low level of satisfaction in ED3. This division is the only rural division without a major regional recreation facility.

The generally high levels of satisfaction indicated by the Burton data are also indicated by survey data generated in the course of the recent master recreation plan studies (1979 and 1980). In the case of Sherwood Park 79 per cent of the survey sample indicated satisfaction with the provision of recreation services, 9 per cent were dissatisfied and 12 per cent were undecided. For the rural area there was no need to ask such a question, mainly because the rural board was constantly in touch with community groups thus helping to ensure that needs were being met. In both master plans (see footnote page 289) there are indications of very high participation rates and of a willingness on the part of many people to pay more for more services.

Service Efficiency and Effectiveness Comparisons

Table 100 shows the revenue and expenditure data for recreation services for Strathcona County and the comparison municipalities.

The per capita level of gross expenditure for Strathcona is higher than all the other municipalities except Airdrie. The county data is the aggregate of two recreation service areas but it is significant that even the expenditure level for the rural area is higher than most

TABLE 100

Recreation Services Revenues and Expenditures, Comparison Municipalities and Strathcona County 1981 (and 1982 for Strathcona)

	dollars per capita			dollars per $1000 EA
	Gross Expenditure	Operating Revenue	Net Expenditure	Net Expenditure
Airdrie	96.32	23.74	72.58	17.0
Ft. Saskatchewan	69.47	24.44	45.03	3.3
Leduc	77.86	30.96	46.90	8.2
Spruce Grove	76.78	22.48	54.30	10.2
Ft. McMurray	60.45	13.52	46.93	8.8
Grande Prairie	72.56	23.37	49.19	7.4
Red Deer	64.76	20.44	44.32	7.8
St. Albert	66.02	24.23	41.79	7.5
4C Average	65.48	20.26	45.22	7.9
County of Leduc	48.11	17.67	30.44	2.8
County of Parkland	17.31	19.15	(1.84)	nil
MD of Foothills	10.24	nil	10.24	1.0
MD of Rockyview	5.85	5.65	0.20	0.01
MD of Sturgeon	13.38	4.40	8.98	1.0
5RM Average	17.51	10.78	6.73	0.6
Sherwood Park				
1981	98.47	52.62	41.85	8.0
1982	101.69	70.25	31.44	5.7
Rural Strathcona				
1981	76.59	40.06	36.53	2.3
1982	76.18	53.62	22.56	1.3
Strathcona County				
1981	89.17	47.28	41.89	4.2
1982	92.02	63.94	28.08	2.8

Note: See footnote page 62 for explanation of revenue and expenditure data.

Source: Financial Statements. Assessment and Population from Appendix page A-7 and A-8.

of the urban centres and it is nearly five times as high as the rural comparison average.

Generally in rural situations the recreation service is largely handled indirectly with the municipality supporting efforts by community groups which tend to be the owners and operators of the recreation facilities. Rural-based municipal recreation complexes such as those at Fultonvale, Josephburg and Ardrossan in Strathcona County are very much the exception. Consequently, the Strathcona service is not really comparable with other rural municipalities. The tenor of the whole service is urban in nature (although Strathcona, like other rurals, has a fairly strong community input in the rural part of the county).

The expenditure level in Sherwood Park exceeds that of all the comparison municipalities and it is nearly 40 per cent higher than the 4C average.

This very high level of expenditure is offset by high levels of operating revenue generated. None of the comparison municipalities comes close to matching the per capita revenue of the Strathcona service, most of which is generated from user charges supplemented by normal levels of provincial operating grants. The revenues as a percentage of expenditure in Strathcona are 53 per cent in 1981 (69 per cent in 1982) compared to the 4C average of 31 per cent.

As a result, the per capita net expenditure for Strathcona is less than all the comparison urban municipalities. In 1981 the net expenditure is quite near the 4C average but the 1982 data show a one-third decline, due to even higher levels of revenue generated.

The fiscal effort (in terms of dollars of net expenditure per $1000 EA) for the entire county is less than one-half that required in the larger urban centres. That effort is considerably higher than the comparison rural municipalities (with the sole exception of Leduc County) but the level of service provided is also much higher.

These basic financial comparisons with the sample municipalities indicate a high level of service provided at a below average tax-supported cost. This general conclusion is supported by information compiled in conjunction with the preparation of the recreation Master Plans for the county and by other data from surveys conducted by the Strathcona Recreation and Parks Department.

Although Strathcona is a rural municipality, its recreation staff tend to look to large-city situations for some perspective on the county service. This disposition has been reinforced due to the recent integration of the rural and urban services. A case in point is the survey conducted by county staff in 1982. Some of the financial information from that survey is presented in Table 101 and the following is a brief summary of the survey findings.[1]

County Recreation Survey Summary: The survey was conducted during the latter part of 1982. It was co-ordinated by Strathcona officials on behalf of their colleagues in Lethbridge, Medicine Hat, Red Deer, Fort McMurray, St. Albert and Grande Prairie. The following summary is based on a preliminary tabulation of the data collected (the data refer

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[1] The source of data was slightly different than that presented in other tables in this section. Despite some variation in individual figures, however, the general conclusions are similar.

TABLE 101

Recreation Services - Comparative Survey of Municipal Spending 1982

	Operating Recovery Rate	Total Net Costs Per Capita
Fort McMurray	28.8%	128
Lethbridge	27.1%	111
Medicine Hat	43.3%	77
Spruce Grove	45.7%	72
Grande Prairie	33.5%	70
Calgary	27.8%	67
St. Albert	36.2%	62
Sherwood Park	56.6%	51
Rural Strathcona	42.3%	57
Strathcona County	51.5%	53

Note: Operating Recovery Rate is percentage of expenditure recovered by operating revenues.
Total Net Costs include capital costs (i.e. debt charges) plus operating costs minus revenues.
Figures based on 1982 budget.

Source: Survey conducted by Strathcona County Parks and Recreation Department, Oct. 1982.

to the 1981/82 period generally and in the case of the county an integrated view of the service has been adopted).

As regards the financing of the recreation service it appears that Strathcona is comparatively hard-line with its policy of aiming for full cost-recovery. The others seem to adopt a softer line on this issue. Also, the Strathcona policy is accentuated by the fact that when calculating facility operational costs, and thus user charges, the focus is on the time when a facility is actually being used, whereas others may be content to base costs on the time when a facility is available for use.

Table 101 shows that the operating recovery rate in Strathcona is well above that of any of the other communities surveyed resulting in relatively low net costs per capita. Nevertheless, user charges do not appear to be particularly high in Strathcona. For instance, ice arena youth rates are about average while commercial rates are above average. Court charges appear to be below average and this is also the case with swimming charges. The high usage of facilities enables individual user charges to be kept at a reasonable level.

On staffing there is a great variation in the mix of full-time, part-time, and temporary/seasonal staff. Strathcona appears to have an above average level of full-time staffing, below average part-time staffing and an average dependence on temporary or seasonal staff (the basis is number of staff per 1000 population).

Salary level for managerial and supervisory staff in Strathcona appear to be on a rough par with those pertaining in the other centres. If anything, the applicable salary range for comparable positions is generally slightly lower. This may relate in part to the fact that only Strathcona is completely non-unionized in its staffing. In the case of the other centres only the managerial personnel are non-unionized.

Community leagues, with a recreational as distinct from social orientation, are not generally present in the centres sampled. In Strathcona's case community leagues are prominent in the rural area but absent in Sherwood Park.

The Strathcona service appears to be very well endowed with municipally-operated facilities (in addition to the rich supply of community-based facilities in the rural area). For instance, in terms of artificial ice arenas, there is one for every 8000 people in Strathcona; in the other centres the ratio is one arena for 10,000 to 12,000 people. Each municipality has at least one indoor swimming pool that is municipally run and some may have additional pools associated with particular non-municipal institutions.

In general, the recreation scene in Strathcona lacks the relatively strong influence exerted elsewhere by the private sector (commercial operators) and by other institutions (regional colleges, universities, YMCA, etc.). Because of the sparse institutional environment and the less rounded commercial development (in the Sherwood Park context), the Strathcona service has become involved in some activities to a comparatively unusual degree, including curling, golfing, and racquet ball sports.

Service Efficiency and Effectiveness

There is every indication that the Strathcona recreation service is at least as good as, and is probably better than, any of the large centres sampled, in terms of both the quality and quantity of the facilities and programming.

This is indicated not only by the survey summarized above but also by information from the Master Plans recently prepared (see footnote page 289). These indicated that rural Strathcona has a very well-developed hierarchy of neighbourhood and district recreation facilities. The major deficiency then identified - the absence of a county-wide park facility - has since been rectified. Sherwood Park is also endowed with a comparatively high standard of municipal recreation facilities in relation to its population size.

As noted earlier, the high level of recreation services is reflected in a high level of expenditure compared to the 4C and 5RM averages. This special servicing effort, especially in the rural parts of the county, would seem imprudent were it not for the high rate of cost recovery which is a notable feature of the service in Strathcona. This is achieved through what is considered an about average level of user charges.

As a result, the per capita net costs of the service and the demands made upon general taxation resources are somewhat below average based on 1981 data, and significantly below average when the 1982 data are considered.

As well, there is evidently a good level of public satisfaction with the county's recreation services, based upon the Burton survey results and responses gathered during the Master Plan preparations.

These factors combined lead to cost-efficiency and effectiveness ratings which are very high. The summary results are tabulated in Table 102. Note that it is considered that the relatively high taxpayer costs in rural areas of the county are more than offset by the urban-level of services which the county provides to its rural residents.

Rural/Urban Benefit-Costs

The existence, until recently, of two separate recreation services - one for Sherwood Park and one for the rural area - has considerably simplified the task of evaluating urban and rural costs and benefits, in financial terms at least. At the same time the growing pressure throughout the late 1970's for an integration of both services, and its formal realization in 1983, testifies to the existence in the past of inequities, inconsistencies and diseconomies of scale as between the urban and rural services. Attempts to resolve these problems have been made for several years and the relative success is indicated in the 1981 and 1982 financial data. From these data it is very difficult to argue that the service is costing or benefitting one group more than the other.

It is the case that prior to integration, each service was operated according to very different philosophies - that to Sherwood Park being comparatively direct, while the rural service incorporated a more facilitatory approach, linking up with the efforts of numerous community groups. These different orientations seem to have ensured that the service

TABLE 102

Recreation Service Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	High	Very High	High
Cost - to users	Average	Average	Average
- to taxpayers	Low	High*	Low
Satisfaction	High	High	High
Efficiency	Very High	High	Very High
Effectiveness	Very High	High	Very High

Note: Possible ratings are Very High
High
Above Average
Average
Below Average
Low
Very Low

* but see comment page 310.

supplied the desired benefits in each case with sensitive programming at tolerable or acceptable user costs.

There can be little doubt that for several years after the formation of Recreation Area No. 2 that the rural service was distinctly favoured, in comparison to the Sherwood Park service, in terms of the allocation of tax revenues. This was an inevitable feature of the decision to levy standard mill rates on contrasting assessment bases, the rural area happening to receive all of the benefits of the industrial assessment. User charges for comparable services could be set lower since general tax revenues constituted the major part of total revenues.

By contrast, the Sherwood Park service had to make do with much less in the way of general tax revenues (in absolute terms and on a per capita basis). Inevitably, user charges had to be set higher in closer observance of break-even principles.

As the rural service took on more of the features of an urban area - the three major county-run recreation centres being particularly significant here - user charges for rural residents began to increase. This upward trend was intensified as a result of council policy around 1980 to standardize fees and charges and as a general consequence of the de facto service integration which preceded the formal integration. Rural service recovery rates still tended to be lower but it is safe to assume that these had improved greatly over that achieved in previous years.

As indicated earlier net service costs per capita for each service are such that differences cancel themselves out over the two years. In 1981 the rural service involved slightly lower per capita costs, while the reverse applied in 1982. The same pattern is evident in relation to tax allocations per capita. It appears therefore that just prior to integration sufficient changes had been made that aggregate service costs were being borne equitably between the urban and rural populations.

With integration it appears that all county residents will benefit to a certain extent from the associated economies of scale and the reduction in service duplication. No doubt there are still cases where a particular service aspect may appear to be benefitting one group rather than the other. For instance, although all major facilities are now subject to the same fees and charges schedule, the urban ones tend to be less costly to operate, and see more usage, than the rural ones. In a sense therefore the urban user may be subsidizing the rural user of a comparable facility. But the situation can also operate in reverse.

For example the relatively high level of voluntary work by rural people in relation to the provision of recreation services frees up a measure of departmental staff resources, which in turn makes it possible to operate the more direct programming in Sherwood Park.

Without a much more detailed investigation of such aspects it appears reasonable to conclude that any such spillovers cancel one another out, and that the recreation service now involves an equitable distribution of costs and benefits for the vast majority of county residents, regardless of whether they are urban or rural.

Q. LIBRARY SERVICES

The County of Strathcona initiated a library service in 1974 but the key date is 1977 when the present facility actually opened and a full service began to be provided.

The library is currently located in the County Administration building in Sherwood Park. It has been designed to serve the whole of the county but it appears to be undersized.

Canadian Library Association standards indicate a need for 0.5 to 0.6 square feet per capita in a municipality with 35,000 to 100,000 total population. With 18,300 square feet presently the level of provision relative to the total county population is only 0.4 square feet per capita. A larger custom-designed facility in a separate building is being contemplated.

A bookmobile service has been provided since January 1982, its establishment being financed largely from 75th Anniversary funds. The bookmobile calls at 11 designated rural community centers every two weeks.

Various aspects of the library service are summarized in Table 103. Certain (U.S.-based) library service standards sources[1] indicate that the library is somewhat understocked, in relation to the population it serves, with regard to both print items and audio-visuals.

Whereas the desired standard is three print items per capita the Strathcona library had only 2.02 per capita in 1981, and 2.24 per capita in 1982. Audio-visuals are about 15 per cent understocked according

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[1] American Library Association Standards 1970; International Federation of Library Associations and Institutions for Public Libraries, 1977; U.S. National Inventory Library Needs, 1975.

TABLE 103

County of Strathcona: Municipal Library Statistics - 1981 and 1982

	1982	1981
Population served	48,024	50,126
Days Open	329	319
Patrol count through turnstile:	250,768	241,387
Circulation of Materials	472,247	409,640
Main:	434,944	409,640
Bookmobile open Jan. 1982	37,303	-
Materials circulated per capita:	10 items	8 items
Materials circulated per member:	40 items	37 items
Books held in reserve for patrons:	8,560	8,038
Membership	11,776	10,952
Urban:	8,122	7,840
Rural:	2,714	2,867
Bookmobile:	682	-
Non-resident:	255	239
Corporate:	3	6
County population having cards	24 %	21 %
Sherwood Park having cards:	28 %	27 %
County excluding Sherwood Park:	18 %	13 %
Library Collection	132,431	127,829
Book stock:	120,158	116,912
Records:	3,786	3,902
Cassetes:	426	279
Films:	118	100
Microfilm	162 reels	154 reels
Toys:	471	448
Pamphlets	6,967	5,698
Maps:	343	336
Periodicals and newspapers	388	400
Information Services		
Reference questions:	26,986	25,269
Interlibrary loans and requests:	956	829
In house use of audio visual materials:	5,536	5,753
Outreach Service		
Patrons receiving home service	41	20
Volunteers delivering home service:	26	22
Programming attendance	11,076	10,433

Source: Annual Report, County of Strathcona Municipal Library, 1982.

to the standards. Because of the economic restraint policy being exercised by the council the library may be falling behind in its desire to achieve the recommended standards.

The circulation of library materials is on a rising trend (8.2 items per capita in 1981, and 9.8 in 1982), as is library membership (helped along by the bookmobile service to Rural Strathcona).

In 1981 urban library memberships accounted for 73 per cent of the total (excluding non-resident and corporate), at a time when Sherwood Park accounted for 57.5 per cent of the total county population. In 1982, if the bookmobile members are considered rural, and the likelihood of some overlapping membership is discounted, urban memberships accounted for 71 per cent of the total (again excluding non-resident and corporate), at a time when Sherwood Park accounted for 62 per cent of the total county population. Thus, while the bookmobile has increased the service benefits accruing to rural residents, in overall terms it appears that Sherwood Park residents represent a disproportionately large share of the users.

In 1981 the library was staffed by a mix of library professionals (3.6 Full-Time-Equivalent (FTE)), assistants (19 FTE) and support staff (5.4 FTE), for a total of 28 FTE. The staff complement has been falling in more recent years, to 27.3 FTE at the end of 1982, in spite of the new bookmobile service, and is presently (June 1983) 26.3 FTE. The latest decrease has been attributed to economic restraints within the county, and because there has been no increase in library grant levels. One consequence of the staff cuts is a reduction in the hours of opening from

66 to 62, the library now being closed on Friday evenings.

The Library Board is currently seeking means of generating more revenue to maintain 1982 service levels. Its actions imply that the library is presently understaffed. This is reported to be especially the case in relation to the children's section. It has been acknowledged, however, that there may have been for a time some overstaffing in relation to technical services (where the auditors recommended a second person to split ordering and receiving duties) and there can at times be overmanning of the circulation desk area (where, because of design factors, two persons are necessary when one might suffice).

The library also places great store by good internal 'housekeeping,' - an up-to-date overdue system and clipping service; a clean catalogue; an accurate membership file; no backlog of uncatalogued materials, - and this requires a high level of staff activity. One consequence of this is a very low percentage of long-overdue library items which are lost to the collection (0.096% of total circulation in 1981).

The reduced staff complement appears to be attending to an increased workload, according to some of the service detail trends indicated in Table 1 (Information Services and Outreach Service), and in the context of the increased circulation and membership activity mentioned earlier. While productivity has obviously increased, the scope for further such gains is increasingly limited, with the remaining staff being particularly hard-pressed to keep up with the increased service demands which accompany periods of economic recession.

A recent survey has indicated that a more accurate total membership figure is in the order of 15,100, which is around one-third of the county's total population. Normal usage levels for public libraries are in the order of 20 to 25 per cent of the population. The same survey also indicated considerable 'in-library' use of the collection, amounting to 29 items per capita or 31 per cent of the total 1982 circulation.

Financial Analysis

Comparative financial data are presented in Table 104. No information is shown for the comparison rural municipalities. Two of them, the Counties of Leduc and Parkland, participate in regional systems, while the three MDs (Foothills, Rockyview and Sturgeon) do not support a public library service. The residents of the MDs may use the municipal libraries at nearby urban centres but they are liable to pay a non-resident user fee.

The financial data have been abstracted from audited financial statements submitted to Alberta Culture's Library Services by the various public libraries or library boards. An attempt has been made to standardize the data by applying a rough classification system. The totals reflect the discounting of capital items and other internal transfers (usually interest on investments).

The main revenue sources are tax allocations and grants - usually in that order - with relatively little being raised from other sources such as user fees or fines.

The provincial government is the source of most, if not all,

TABLE 104

Library Services, Financial Analysis 1981 (and 1982 Strathcona)

	Revenues (dollars per capita)				Expenditures (dollars per capita)				Expenditures (per $1000 e.a.)
	Grants	Fees, Fines etc.	Tax Support	Tax revenues[1] (discounted)	Salaries & Benefits	Library Materials	General Services	Total expendits.[1] (discounted)	Total expendits.
Town of Airdrie	3.38	0.26	3.62	7.37	2.27	4.04	1.16	7.49	1.75
Town of Ft. Sask.	3.47	0.50	11.28	15.68	7.98	3.78	3.98	15.74	1.15
Town of Leduc[2]	3.55	0.33	1.11	5.19	3.78	0.25	0.99	5.02	0.88
Town of Spruce Grove[3]	3.49	0.22	8.78	12.73	9.04	1.35	2.09	12.74	2.39
City of Ft. McMurray	3.99	0.62	5.95	10.57	4.71	1.93	2.50	9.56	1.53
City of Grande Prairie	5.07	0.82	6.44	12.70	6.77	2.77	1.79	11.81	1.79
City of Red Deer	4.05	0.50	7.16	11.72	6.15	2.95	2.07	11.42	2.00
City of St. Albert[4]	3.40	0.69	8.14	12.94	n.a.	n.a.	n.a.	12.65	2.27
4 City Average	4.12	0.66	6.92	11.98	5.88 (3C)	2.55 (3C)	2.12 (3C)	11.36	1.90
Strathcona County 1981	3.49	0.79	10.11	14.43	8.74	2.40	4.01	15.18	1.52
1982	4.00	1.02	8.54	13.59	10.72	3.17	0.96	15.03	1.47

[1] Capital items, returns on investments (interest), and other internal transfers have been discounted.

[2] Pictorial History Book transactions have been discounted.

[3] 1980 grants included in 1981 accounts have been discounted; tax levy estimated as that necessary to cover deficit on non-tax revenues in relation to total expenditures.

[4] No expenditure breakdown possible because of accounting procedure; expenditures have not been discounted.

Sources: Audited Library Board financial statements, and year-end trial balance in case of Strathcona, 1982; calculations by UAG staff.

the grant revenues. These are paid out on a standard per capita basis, but some libraries may benefit from special financial assistance, such as the resource-sharing grant monies paid to Red Deer and Grande Prairie.[1]

However, the level and quality of the library service available is basically dictated by the level of tax support, which is also the best indicator of the net cost of the service.

Strathcona County is among the highest in terms of tax support per capita, being bettered only by Fort Saskatchewan. The Strathcona level is also significantly higher than the 4C average.[2]

A similar pattern prevailed in relation to total expenditures per capita, with the Strathcona level being well above the 4C average, and being bettered only by Fort Saskatchewan.[3]

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[1] This is a special grant for non-metropolitan cities to assist in the provision of library services to their surrounding areas.

[2] It might also be noted that in the case of the two regional library systems Parkland County contributed $3.6 per capita, and Leduc County contributed $5.3 per capita, both in 1981.

[3] In 1981 the Strathcona figure included an expenditure for building and equipment rental, payable to the general administration of the county, which had the effect of increasing the amount of tax support necessary in that particular year. (The sum in question amounted to about $2.8 per capita.) In 1982 the county directly absorbed these expenses, evidenced by the marked drop in the library's 'general services' expenditures. The expenses associated with the rental or leasing of space, depending on whether or not they are included in the library accounts, may also influence the level of expenditure and tax support in the other cases. For example, while this expense appears to be included in the case of Fort McMurray in 1981, it seems to be excluded in the cases of Red Deer and Grande Prairie. In comparison with the cities therefore the Strathcona levels of tax support and general services expenditure may be somewhat overstated in 1981, and understated in 1982.

The main expenditure item in the case of Strathcona is staff-related, with a comparatively high outlay for salaries and benefits. While much higher than the 3C average (St. Albert data not available) the Strathcona level is bettered only by Spruce Grove. By contrast there is a comparatively low per capita level of expenditure indicated with respect to library collection materials, especially in relation to total expenditures.

The Strathcona library service involves a level of fiscal effort which is well below the 4C average. However, it is several times greater than the effort being made by Parkland and Leduc Counties ($0.30 and $0.48 per $1000 equalized assessment) and incomparably better than the three MDs.

The 1982 Strathcona data reflect the expenses associated with operating the bookmobile service to the rural areas of the county. These totalled $48,717 - 1982 being the first full year of operation. The only other comparison library operating a bookmobile service in 1981 was Fort McMurray.

Public Opinions

According to the 1979 Burton survey the library service attracted comparatively high levels of use by both urban and rural residents of the county.

The service was rated as 'good' by a large majority of those responding. Urban residents were particularly satisfied while those living on rural estates were less satisfied. Overall 67.3 per cent of respondents rated the service as good, 12.2 per cent rated it average, and only 2.7 per cent felt it to be poor (17.9 per cent offered no response). (See Appendix Table III-3, p. A-55; also Appendix Table III-6, p. A-62.)

The library service was also rated by rural residents in the course of a 1979 survey for the rural recreation master plan. Of the 72 per cent of respondents who indicated they used the library regularly, only 15 per cent expressed dissatisfaction with the services provided, with most of those indicating that distance from the Sherwood Park facility was the biggest problem. Seventy per cent of respondents indicated they would use a bookmobile service 'often' or sometimes, with a stronger need for this service being expressed by respondents located farthest from the library. The bookmobile service was justified in part by the results of this survey.

Service Efficiency and Effectiveness Comparisons

Comparative Analysis

The measurement and comparison of the quality of library service has long constituted a perplexing problem for professionals in this field. Public library service has historically been judged by comparing libraries against quantitative national standards published by various library associations.

More recently, there has been a trend away from the use of such national standards and toward a local determination of library needs.

The current thinking, which is being promoted by provincial authorities, is for individual libraries to use a community-based planning process to determine local needs. This has been done most recently in Grande Prairie, and it is known that the Strathcona library hopes to undertake a similar process in the near future.

The Strathcona library service is not readily comparable with any others in Alberta, with the possible exception of large urban centres serving a similar population size (e.g. Lethbridge and Red Deer). There is no comparison with the service provided in other rural municipalities, even if these involve regional systems. As well, the bookmobile service sets Strathcona apart not only from other rurals, but also from the large urban-centred services, which are spared the responsibility of having to cater specifically for rural populations.

Notwithstanding the above limitations some comparative data are presented in Table 105.

With respect to the library collection of books and audiovisuals the Strathcona service is comparatively well-stocked (being bettered only by Fort Saskatchewan and Spruce Grove in per capita terms).

The Strathcona library is also characterised by the highest circulation rate per capita, well in excess of the 4C average for example. However, given the outlay on staff and the overall staff complement, the library is open for relatively few hours, especially in comparison with Red Deer and especially given the recent cut.

Library staff per 1000 population in the Strathcona case is generally above average, especially in comparison with the 4C average,

TABLE 105

Library Services: Comparative Analysis, 1981 (and 1982 Strathcona)

	Library Stock[1] (per capita)	Circulation (per capita)	Hours open per week	Staffing (Full-time-equivalent)				
				Professionals	Assistants	Support	Total	Total per 1000 pop.
Town of Airdrie	1.69	3.3	30	-	-	1.4	2.4	0.29
Town of Ft. Sask.	2.78	0.9	42	1	5.5	2.5	9.0	0.74
Town of Leduc	1.77	4.3	45	1	3.4	-	4.4	0.36
Town of Spruce Grove	2.64	7.6	57	1	1	2.5	4.5	0.46
City of Ft. McMurray	1.12	3.8	62	3	7	3.5	13.5	0.44
City of Grande Prairie	1.90	4.8	65	3	1	9	13	0.54
City of Red Deer	2.47	7.0	75.5	3	16	-	19	0.42
City of St. Albert	1.95	6.8	69	3.7	1	10.2	14.9	0.48
4C Average	1.86	5.6	67.9	-	-	-	15.1	0.47
Strathcona County								
1981	2.42	8.2	66	3.6	19.0	5.4	28	0.56
1982	2.60	9.8	62	n.a.	n.a.	n.a.	27.3	0.57

1 Books and audiovisuals only.

Sources: Alberta Culture (Library Services); Strathcona Library Annual Report 1982; Calculations by UAG.

but it is not the highest, being bettered by Fort Saskatchewan. The bookmobile service accounts for part of this apparently high staff level, and the 1982 figure is inflated because of annexation lowering the county's population. The above average staffing may also be a reflection of the demands generated by above average library membership and circulation.

Efficiency and Effectiveness Rating

Being a comparatively new library and having been instituted at a time when the county was relatively well off (in terms of tax base in relation to expenses), the library service has been enabled to become one of the most highly-rated in Alberta. While the library may be undersized and understocked in comparison with national standards, and understaffed in the estimation of the local library board, there appears to be little question that the level of service provided is above the average for comparably-sized urban municipalities in Alberta. It is essentially above comparison with the situation in other Alberta rural municipalities, most of which make little or no effort to provide for a library service to their residents.

On a provincial basis, the Strathcona service is characterised by high standards, a wide range and intensive level of programming and special services, and a very high per capita circulation rate. These data underline the library's popularity and usefulness.

The high service level is supported by relatively high expenditures per capita, which are largely a reflection of relatively high expenses for staff salaries and benefits. Some consideration might be given to boosting the budget allocation for books and other library materials, although this might imply the need for economies in other areas (and especially staffing). There also appears to be some scope for the county to increase its fiscal effort for the service, to a level which is closer to the average for systems servicing large populations (assuming the county wishes to be judged by urban standards).

The current level of per capita tax support is well above that for other rural municipalities, and is above that for the sample cities.[1] But given the relatively high service level Strathcona taxpayers appear to be receiving excellent value for their tax dollar.

From a users perspective the situation is the same since there is little or nothing in the way of user fees for the services currently offered. This may change, however, in the near future thereby enabling some desired service improvements without placing unwarranted demands on general tax revenues.

Various public opinion poll data, as well as membership and circulation data, all point to high levels of satisfaction with the library service for both urban and rural residents.

As summarized in Table 106 the Strathcona library service appears to be characterized by above average levels of cost-efficiency and cost-effectiveness. These ratings apply in the rural as well as the urban area of the county, primarily because of the special effort made (such as the bookmobile service) to enable all county residents to utilize the library service.

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[1] Although it would probably be closer to the average if allowance is made for the various treatments of the expense for renting or leasing library space.

TABLE 106

Library Services Evaluation

	Sherwood Park	Rural Areas	Entire County
Level	High	Very High	High
Cost	Above Average	Above Average	Above Average
Satisfaction	High	High	High
Efficiency	Above Average	Above Average	Above Average
Effectiveness	Above Average	Above Average	Above Average

Note: Possible ratings are Very High
High
Above Average
Average
Below Average
Low
Very Low

R. CONSOLIDATED FINANCIAL REVIEW

The previous sections of Part III have examined service trends from 1976 to 1981 and the individual municipal services. Each section, in fact, has been like a minor report in itself. This section of Part III pulls together the information presented, especially the financial details, to enable a consolidated analysis. It is presented in four main steps.

First, the discounted revenue and expenditure data for Strathcona (presented for each service in Sections B to Q) are consolidated to put the services in an overall perspective. Their relative importance in terms of the percentage of totals they represent is examined as well as their municipal tax requirements.

Second, the revenues and expenditures which have been discounted in the individual service analyses are examined. These primarily include internal fund transfers and debt charges. The importance of these items is examined in relation to their impact upon total municipal tax requirements.

Third, the unallocated general non-tax revenues of Strathcona are examined. These include such revenues as unconditional grants, tax penalties and costs, returns on general purpose investments and revenues from municipal franchises and concessions. Their importance in terms of reducing overall municipal tax requirements is examined.

Fourth, and finally, the overall tax requirements in Strathcona including those for school and other requisitions is presented in terms of the residential taxes examined in Section G of Part II.

Discounted Revenue and Expenditure Data

Most of the data presented in Table 107 is rounded to the nearest $1000. Refer to the footnote on page 62 for the normal discounting procedure. Any extra adjustments made are footnoted.

Table 107 provides the dollar figures primarily for a matter of record. Table 108 presents percentages of totals which put the services into a total county perspective.

The overwhelmingly dominant service is transportation which accounted for 57 per cent of the net expenditure in 1981 and 49 per cent in 1982. General government and recreation were the next two important services. Those two combined with transportation represent about 80 per cent of the net expenditure in both years.

Note that the services of disaster services, water and sewage show a net gain in terms of operating expenditures. However, as will be noted later, that gain for water and sewage is offset by the debt charges associated with those services.

In terms of the differences between 1981 and 1982, the services of general government, police and fire show significant increases while transportation, family and community services, agricultural services and recreation show significant decreases. The reasons for these changes have been noted in the individual service sections.

Debt Charges and Net Transfers

Table 109 illustrates the importance of debt charges and internal fund transfers for each of the individual services.

TABLE 107

Strathcona County Discounted Operating Revenues and Expenditures by Service Categories, 1981 and 1982

	in thousands of dollars					
	1981			1982		
	Gross Expend.	Oper. Revenues	Net Expend.	Gross Expend.	Oper. Revenues	Net Expend.
General Government[1]	4,288	1,680	2,608	5,116	1,433[a]	3,683
Police	1,210	818	391	1,695	794[b]	901
Fire	1,209	15[c]	1,194	1,281	13[c]	1,268
Disaster Services	1.3	6.9	(5.6)	2.8	7.9	(5.0)
Ambulance	328	110	218	363	128	235
Bylaw Enforcement	101	35	66	158	44	114
Transportation	12,772[d]	1,329[d]	11,443	9,407	1,310	8,097
Public Transit	1,391	797	594	1,370[e]	842[e]	528
Garbage	675	nil	675	667	11	656
Water	2,053[f]	2,162[f]	(109)	1,850[f]	2,334[f]	(484)
Sanitary Sewage	668	902[g]	(234)	826	1,199[g]	(373)
Family & Comm. Services	709	488	221	719	629	90
Agricultural Services	501	204	297	229	120	109
Recreation	4,466	2,368	2,098	4,412	3,066	1,346
Library	752	216	536	721	242	479
TOTAL	31,124	11,131	19,993	28,817	12,173	16,644

Notes: Figures may not add exactly due to rounding.

1 includes planning services.
a Conditional grant excluded of $293,000.
b Federal grant of $106,000 excluded.
c Interest Stabilization excluded, $55,000 in 1981 and $12,000 in 1982.
d Special adjustments made: See pages 138 to 142.
e Special adjustments made: $45,370 less in revenue and $31,175 more in expenditure than reported in Financial Statement due to late adjustments on grants and ETS contract.
f Special adjustments made: see pages 215 to 222.
g Interest Stabilization excluded: $48,250 in 1981 and $47,730 in 1982.

Source: Financial Statements discounted as per footnote page 62 plus adjustments footnoted above.

TABLE 108

Strathcona County Discounted Net Expenditures, by Service Categories as per cent of Total, 1981 and 1982

	Per Cent of Total	
	1981	1982
General Government[1]	13.04	22.13
Police	1.96	5.41
Fire	5.97	7.62
Disaster Services	-0.03	-0.03
Ambulance	1.09	1.41
Bylaw Enforcement	0.33	0.68
Transportation	57.24	48.65
Public Transit	2.97	3.17
Garbage	3.38	3.94
Water	-0.55	-2.91
Sanitary Sewage	-1.17	-2.24
Family & Comm. Services	1.11	0.54
Agricultural Services	1.49	0.65
Recreation	10.49	8.09
Library	2.68	2.88
TOTAL	100.00	100.00

Note: Figures may not add exactly due to rounding.

1: includes planning services.

Source: see Table 107.

TABLE 109

Strathcona County Debt Charges and Net Transfers and Other Discounted Expenditures, by Service Category, as per cent of Total, 1981 and 1982

	in thousands of dollars			
	Debt Charges[1]		Net Transfers & Other Exp.[2]	
	1981	1982	1981	1982
General Government[3]	240	1,051	141	1,309
Police	6.5	6.5	41	-99
Fire	nil	41.5	123	19
Disaster Services	nil	nil	nil	nil
Ambulance	nil	nil	1.5	0.3
Bylaw Enforcement	nil	nil	0.25	nil
Transportation	374	437	-96	1,053
Public Transit	52.5	28.5	nil	-14
Garbage	nil	nil	nil	nil
Water	1,663	673	-1,039	-460
Sanitary Sewage	174	180	174	2
Family & Comm. Services	nil	nil	-41	2
Agricultural Services	nil	nil	23	-15
Recreation	278	278	-84	98
Library	nil	nil	-24	14
TOTAL	2,788	2,696	-781	1,909

[1] includes bank charges and short-term interest and Long-Term Debenture Debt Charges.

[2] calculated as the difference of expenditures from internal fund transfers, other expenditures discounted as per footnote page 62 (except those related to debt charges) and expenditures discounted for special adjustments MINUS revenues from internal fund transfers, other revenues discounted as per footnote page 62 and revenues discounted for special adjustments. See notes to Table 107 for special adjustments made.

[3] includes planning services.

Source: Financial Statements.

Notice that debt charges occur only for the services of general government, police and fire, transportation and public transit, water and sewage, and recreation. The major differences between 1981 and 1982 are: the large increase in general government debt and the corresponding large decrease in water debt due to the transfer of some water service debt to the general government function (see page 232); and the new debt for fire services relating to the acquisition of an articulated aerial platform and a pumper/tanker unit. The total debt charges decreased by 3.3 per cent from 1981 to 1982.

In regard to the net expenditure for transfers and other adjustments notice that in 1981 there was a net gain. More money (some $781,000) was drawn from reserves and other funds than the amount expended in building up such funds. The reverse situation occured in 1982 with $1,909,000 more being spent on transfers than the revenue derived from transfers.

The major expense for transfers in 1982 occured for general government services (for general purpose reserves) and for transportation services. The major reserve revenue used was in the services of police protection and water.

Table 110 presents the totals for 1981 and 1982. Notice that the net operating expenditures declined by about 17 per cent from 1981 to 1982 but that decrease was largely offset by net expenditures for transfers. Also, in 1982 $2.5 million was set aside as an operating continengcy reserve.[1]

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[1] The total net expenditure indicated for 1982 is $475,000 less than that reported in the county's financial statement. The difference is primarily due to the adjustments made for the water service including the accounting of revenues received recently from the City of Edmonton which were not reported in time for the 1982 statement. See pages 215 to 222.

TABLE 110

Strathcona County, total net expenditures, debt charges and transfers, 1981 and 1982

	1981		1982	
	$1000 dollars	% of TOTAL	$1000 dollars	% of TOTAL
Discounted Total Net Operating Expenditures	19,993	90.8	16,644	70.0
Total Debt Charges	2,788	12.7	2,696	11.3
Total Net Transfers and Other Expenditures	-781	-3.5	1,909	8.0
Operating Contingency Reserve Net Expenditure	nil	nil	2,540	10.7
TOTAL NET EXPENDITURE	22,000	100.0	23,789	100.0

Source: see Tables 107 and 109.

Unallocated Non-Tax Revenues

The County of Strathcona, like all Alberta municipalities, receives significant revenue which is not allocated to specific services. These revenues are important in helping to reduce overall municipal tax requirements. Table 111 shows the amounts for Strathcona for 1981 and 1982.

With the exception of other own source revenue, all categories of the unallocated non-tax revenues show increases from 1981 to 1982. The largest increase is apparent for provincial unconditional grants which in 1982 included the first payment (of $4.4 million) in compensation for annexation losses (see footnote 2 page 2).

Total Tax Requirements

Table 112 indicates the overall municipal tax requirements. The amount required for 1982 is 20 per cent less than that for 1981. But recall that the county lost 20 per cent of its tax base through annexation in 1982 (see page 2).[1]

Table 113 shows the total tax requirements including those for planning, school and health requisitions. Notice that despite the loss of property due to annexation, the tax requirements for the supplementary school requisition increased by 14 per cent from 1981 to 1982. The increase in the supplementary school mill rate from 34.71 mills in 1981 to 46.37 mills in 1982 more than offset the losses due to annexation.

Overall, however, the total tax requirements decreased by about 10 per cent and by about $40 per capita from 1981 to 1982.

Table 114 shows the proportion of taxes derived from the various levies upon the two main categories of property - residential and non-residential.

The school foundation levy applies only to non-residential property. The amounts involved represented 14 per cent of total taxes in 1981 and 12.7 per cent in 1982.

The proportion of the taxes derived from the two classes of property for the planning fund, supplementary school and health requisitions corresponds to the proportion of the tax base represented

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[1] The actual municipal taxes collected in both years were higher than the amounts indicated in Table 112. The difference is due to surpluses which the county generated of $176,500 in 1981 and $2.7 million in 1982.

TABLE 111

Strathcona County, Unallocated Non-Tax Revenues, 1981 and 1982

	in thousands of dollars 1981	1982
Tax Penalties and Costs	546.6	988.7
Franchise & Concession Contracts	29.3	40.5
Investment Returns	856.4	1,446.2
Other Own Source Revenue	33.2	27.5
Federal Unconditional Grants	nil	3.2
Provincial Unconditional Grants	1,359.5	6,093.3
TOTAL	2,825	8,599.4

Source: Financial Statements.

TABLE 112

Strathcona County, Municipal Tax Requirements, 1981 and 1982

	in thousands of dollars 1981	1982
Total Functionalized Net Expenditure (from Table 110)	22,000	23,789
less Total Unallocated Non-Tax Revenues (from Table 111)	2,825	8,599
TOTAL MUNICIPAL TAX REQUIREMENTS (per capita)	19,175 ($383)	15,190 ($317)

TABLE 113

Strathcona County, Total Tax Requirements, 1981 and 1982

	1981		1982	
	$1000 dollars	% of TOTAL	$1000 dollars	% of TOTAL
Municipal Tax Requirements (from Table 112)	19,175	55.3	15,190	48.7
Requisitions:				
- Planning Fund	172	0.5	169	0.5
- Supplementary School	10,385	30.0	11,800	37.8
- School Foundation	4,850	14.0	3,974	12.7
- Health & Nursing Homes	78	0.2	50	0.2
TOTAL TAX REQUIREMENTS ($'s per capita)	34,660 ($692)	100.0	31,183 ($650)	100.0

Source: Financial Statements.

TABLE 114

Strathcona County, Source of Property Taxes by Type of Property 1981 and 1982

	1981		1982	
	$1000 dollars	% of TOTAL	$1000 dollars	% of TOTAL
Non-Residential Property[1]				
- Municipal Taxes	10,211	29.5	6,690	21.5
- Planning Fund	82	0.2	64	0.2
- Supplementary School	4,954	14.3	4,497	14.4
- School Foundation	4,850	14.0	3,974	12.7
- Health & Nursing Homes	37	0.1	19	0.06
Sub total	20,134	58.1	15,244	48.9
Residential Property[2]				
- Municipal Taxes	8,964	25.9	8,500	27.3
- Planning Fund	90	0.3	105	0.3
- Supplementary School	5,431	15.7	7,303	23.4
- Health & Nursing Homes	41	0.1	31	0.1
Sub total	14,526	41.9	15,939	51.1
TOTAL TAXES	34,660	100.0	31,183	100.0

[1] includes pipe, power, cable TV and grants-in-lieu as well as commercial and industrial properties.

[2] includes farmland and mobile homes as well as residential property.

Source: Financial Statements and calculations by UAG staff.

by the two classes. In 1981 52.3 per cent of the tax base was residential (and farm) property; in 1982 that percentage rose to 61.9 per cent due to the large amounts of industrial property lost to annexation.

The county levies a higher mill rate on non-residential property than residential property for the municipal taxes. Consequently, the proportion of the municipal taxes collected from non-residential property is greater than the proportion of the tax base represented by non-residential property - 53.2 per cent of taxes, 47.7 per cent of tax base in 1981; 44 per cent of taxes, 38.1 per cent of tax base in 1982.[1]

Overall, the non-residential property component contributed 58.1 per cent of 1981 taxes and 48.9 per cent of 1982 taxes. The lower 1982 percentage is attributable to the property losses from annexation.

Residential Tax Bill

Earlier in this report (see pages 32 to 36) it was noted that taxes upon comparable residential properties were in the upper range exhibited by the comparison urban and rural municipalities. Subsequent to that analysis, it has been shown under the individual service evaluations that many services provided in Strathcona are considered to be at a higher level than those in the comparison municipalities - most notably, transportation, rural fire protection and recreation services.

In those service evaluations the relative benefits and costs to the urban and rural components of the county were discussed. (This aspect is examined further in Part IV of this report, see page 377.) Regardless, the taxes levied on residential property throughout the county are the same. In fact, the 1982 taxes calculated for the 'A' sample property (standard 1200 sq. ft. bungalow) were identical in Sherwood Park and in a 3-acre rural residential subdivision (see Table 16 page 33 and Table 17 page 34).

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[1] The mill rates were: in 1981, 52.9 residential, 66.06 non-residential; in 1982, 62.09 residential, 79.34 non-residential. Those rates include the minor amounts for planning and health requisitions.

Table 115 shows the proportion of that tax bill represented by the various municipal services and the requisitions. The data are basically self-explanatory. Note that almost 45 per cent of the total tax bill is due to requisitions for school, planning and health services. Another 35 per cent is due to the main services of general government, police and fire protection, transportation services and recreation and library. In excess of 15 per cent is attributable to debt charges and transfers to reserves and other funds, while the remaining 5 per cent is due to the six minor services of public transit, garbage collection and disposal, ambulance, bylaw enforcement, family and community services and agricultural services.

TABLE 115

Strathcona County, proportion of residential tax bill by municipal service categories and by requisitions 1982

	Taxes in dollars for Sample Property A[1]	Per Cent of Sub-Total	Per Cent of TOTAL
Municipal Levy			
- General Government	89	14.9	8.4
- Police and Fire	52	8.7	4.9
- Transportation	196	32.9	18.6
- Public Transit	13	2.2	1.2
- Garbage	16	2.7	1.5
- Recreation & Library	44	7.4	4.2
- Debt Charges	65	10.9	6.2
- Reserves & Other Funds	107	17.8	10.1
- Others	13	2.2	1.2
Sub Total	596	100.0	56.4
School Levy	450	n.a.	42.7
Planning Levy	7	n.a.	0.7
Health Levies	2	n.a.	0.2
TOTAL	1,055	n.a.	100.0

Note: may not exactly add to total due to rounding. n.a. means not applicable.

[1] Property A is a standard single-family bungalow of 1200 sq. ft. on a normal lot in Sherwood Park and on a 3-acre rural residential subdivision.

[2] Others includes ambulance, bylaw enforcement, family and community services, agricultural services. Operating expenditures for disaster services, water and sanitary sewage represent no burden on general tax revenues.

Source: Calculations by UAG staff based on data from Tables 16, 17, 107, 110, 113 and 114. Data should be viewed as estimations only.

S. STAFFING AND CONTRACTING CONSIDERATIONS

This final section of Part III examines (1) the proportion of operating expenditures which is due to contracted services and (2) the relative levels of municipal staff in comparison with the sample cities and rural municipalities.

Contracted Services

The provision of municipal services is often contracted out by municipalities to private enterprises. The garbage collection service is one example in the County of Strathcona. Another contracted service is police protection which is undertaken by the RCMP. As well, certain road maintenance chores are contracted to private operations.

Table 116 shows the breakdown of discounted operating expenditures into four main categories by type of expenditure.

The percentage of the total represented by 'salaries, wages and benefits' in Strathcona County for 1981 is very similar to the 5RM average but considerably less than the 4C average. The percentages for 'contracted and general services' and 'materials, goods, supplies and utilities' lie between the 4C and 5RM averages, while the percentage for 'purchases from other governments' is very similar to the 4C average.

The percentage of the total represented by 'contracted and general services' and 'purchases from other governments' combined is 30.5 for the 4C, 29.7 for the 5RM and 34.4 for Strathcona in 1981 and 33.0 in 1982. Some of the individual comparison municipalities have

TABLE 116

Breakdown of Discounted Operating Expenditures, by Type of Expenditure, Comparison Cities and Rural Municipalities 1981 and Strathcona County 1981 and 1982

	Per cent of Total				Dollars per capita
	Salaries, Wages Benefits	Contracted & Gen. Services	Purchases from Other Gov'ts.	M.G.S. & U.[1]	Total Discounted Expenditure
Fort McMurray	61.4	10.0	6.0	22.6	529
Grande Prairie	45.2	36.4	nil	18.4	453
Red Deer[2]	52.2	20.0	17.2	10.5	515
St. Albert	55.2	12.6	18.8	13.4	479
4C Average	54.0	18.6	11.9	15.5	498
County of Leduc	29.2	37.1	3.4	30.4	639
County of Parkland	48.5	34.6	0.4	16.5	437
MD of Foothills	30.2	28.0	0.4	41.4	376
MD of Rockyview	35.2	19.2	-	45.6	563
MD of Sturgeon	25.1	22.2	3.1	49.6	419
5RM Average	35.7	28.4	1.3	34.6	481
Strathcona County 1981	36.1	23.2(3)	11.2(4)	29.5(4)	594
1982	44.0	21.4	11.6(5)	23.0(5)	597

1 Materials, Goods, Supplies and Utilities.
2 Excludes airport and electricity operating expenditures.
3 Reduced by 2.7 million. That amount is the expenditure classified in the 1981 trial balance as internal charges for building and equipment rentals, equipment repair and maintenance, etc. It has been assumed that all such expenditures were classified as 'contracted and general services' in the financial statement. No internal expenditure transactions occured in 1982.
4 Reallocation of $2.5 million from 'materials, goods, etc.' to 'purchases from other governments,' that amount being payments to the City of Edmonton for treated water and for sewage treatment services.
5 Reallocation of $2.1 million, as for footnote 2.

Source: Financial Statements. Population used is from Appendix page A-7. Expenditures discounted as per footnote page 62 with codes 765 and 770 excluded as well.

a percentage higher than that for Strathcona (Grande Prairie, Red Deer, Leduc and Parkland counties), so overall it would appear that the proportion of expenditure represented by contracted services and purchases from other governments (as opposed to direct expenditures for municipal employees and materials and goods) is about normal in Strathcona.

Note, that with the sole exception of the County of Leduc, the per capita level of expenditure is higher in Strathcona than in the comparison municipalities. This aspect has been discussed in Part II and section A of Part III of this report. The individual service evaluations of Part III indicate that the comparatively high level of expenditure is attributable in particular to recreation services throughout the county; to water and sewage services in Sherwood Park; and to fire protection and road maintenance services in the rural parts of the county.

Staffing Levels

In earlier sections of this report the comparative level of municipal staffing for specific services was examined. (See pages 69, 83, 160.) Table 117 summarizes overall municipal staffing levels for Strathcona and the comparison cities and rural municipalities.

First, notice that the proportion of the total staff represented by part-time employees in Strathcona (about 30 per cent) is similar to that for Grande Prairie, St. Albert and the MDs of Foothills and Sturgeon. The County of Parkland and the MD of Rockyview are notable for having very few part-time staff.

TABLE 117

Municipal Staff Levels, Comparison Cities and Rural Municipalities 1981 and Strathcona County 1981 and 1982

	Part-Time Staff	Full-Time Staff		All Staff		
	No.	No.	No. per 1000 pop.	No.	No. per 1000 pop.	Salaries, Wages & Benefits Exp. per staff
Fort McMurray	21	352	11.4	373	12.1	$26,800
Grande Prairie	56	222	9.2	278	11.5	$17,800
Red Deer*	38	600	13.2	638	14.1	$20,400
St. Albert	99	288	9.2	387	12.4	$21,302
4C Average	n.a.	n.a.	11.1	n.a.	12.7	$21,600
3C Average+	n.a.	n.a.	10.0	n.a.	12.1	$22,300
County of Leduc	90	55	5.0	145	13.2	$14,100
County of Parkland	9	212	8.3	221	8.7	$24,400
MD of Foothills	16	32	3.5	48	5.3	$21,400
MD of Rockyview	1	115	6.8	116	6.9	$28,800
MD of Sturgeon	21	58	3.6	79	4.8	$21,800
5RM Average	n.a.	n.a.	6.0	n.a.	7.7	$22,200
Strathcona County						
1981	120	368	7.4	488	9.7	$22,000
1982	177	395	8.2	572	11.9	$22,000

n.a. not applicable

* levels inflated slightly by operation of airport and electricity utility.

+ Red Deer excluded.

Source: Financial Statements. Population used is from Appendix page A-7.

Second, the number of full-time staff per 1000 population and the number of total staff per 1000 population in Strathcona County lies between the city and rural averages especially in 1981. For 1982 staff increases in Strathcona and the loss of population due to annexation pushes the total staff ratio to a level very similar to the 3C average (Red Deer excluded).

Third, the expenditure on 'salaries, wages and benefits' divided by the total employees shows Strathcona to be virtually identical to both the city and rural averages.

As a brief summation of this final section of Part III, it can be concluded that the municipal operation in Strathcona County is characterized by comparatively normal levels of:

- the proportion of expenditure represented by contracted services and purchases from other governments,
- staffing levels per 1000 population, and
- average expenditures on salaries and wages per municipal employee.

MAIN REPORT

PART IV - OVERALL ANALYSIS AND CONCLUSIONS

MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

PART IV - OVERALL ANALYSIS AND CONCLUSIONS

This part of the Main Report draws together the information presented in earlier parts and provides some interpretative analysis and conclusions regarding the provision of municipal services in Strathcona County.

The three preceding parts of the Main Report provide the foundation for this concluding part.

Part I - INTRODUCTION set the context for the entire report in terms of the special structure of the county and the recent events which prompted the study. Data sources and comparison municipalities were explained.

Part II - STRATHCONA COUNTY OVERVIEW highlighted significant aspects of the county in relation to the comparison municipalities. Information presented included population size, growth and density; size and mix of property assessment base; overall operating expenditures and revenues and the relative importance of specific categories; and comparative data on the level of municipal and school taxes and long-term debt outstanding.

Part III - MUNICIPAL SERVICES provided a detailed examination of specific municipal services, including cost, method of financing, public perception, and comparisons with other urban and rural municipalities.

In the following Part IV a consolidated analysis of the county's operation is presented. This analysis includes a review of the implications of the county's development since 1976, a discussion of the current service levels and costs, and an examination of service provision and financing in relation to the special structure of the county.

A. STRATHCONA COUNTY - RECENT TRENDS

This report has focussed on the periods 1976 to 1981 and 1981/82. The late 1970's period was one of rapid economic and population growth in Alberta but that ended abruptly in 1981. Now, in the early 1980's, municipalities are being confronted with the general problems of financial restraint and retrenchment in response to the sudden economic slowdown. Strathcona County has also had to cope with the loss of area, population and assessment as a result of the 1 January 1982 annexation decision.

As a consequence, the county recently has been, and to a large extent still is, in a period of major transition. Therefore, while the time periods examined in this report are fundamental to an understanding of the current state of municipal affairs in the county, they are of less relevance for reliably projecting future trends.

Nevertheless, the insights gained with respect to the individual services, their comparative characteristics, and the broad pattern of net service costs are of value in assisting the county to cope constructively with the changes which have occured, and are impending, due to annexation and the economic slowdown.

The 1976 to 1981 Period

The municipal activities undertaken by Strathcona County involved a major expansion in scope and magnitude during the late 1970's.

Completely new services were added (public transit, library); others were significantly expanded (especially the construction of new recreation and parks facilities); the capacity of others was increased (water and sewage); and substantial new county offices in Sherwood Park were occupied. In general, the services had to be broadened to meet the relatively expensive demands associated with the rapidly-growing country residential population.

Most of the population growth in the county during the late 1970's occured in the rural areas. As the data below indicates, that was in contrast to earlier years when Sherwood Park absorbed the majority of the new population.[1]

Population Growth per 5-year periods

	Sherwood Park	Rural Strathcona
1961-66	3,416	694
1966-71	7,943	1,607
1971-76	12,252	4,291
1976-81	2,503	5,782

By the latter part of the 1970's Sherwood Park was reaching its designed capacity, meaning that economies of scale were realized in many services. That enabled the county to improve services such as recreation and introduce new ones such as public transit and the library.

The rural residential growth, on the other hand, necessitated major expenditures. This was especially so for transportation services because of the growing demand for new collector roads, for increased capacity on the major arterials and for increased maintenance (to a costly, oiled standard). Upward pressure was also placed on the expenditures for recreation, garbage collection, fire, ambulance, bylaw enforcement and agricultural services. And, unlike the situation in Sherwood Park, there were limited opportunities to take advantage of economies of scale because of the dispersed nature of the rural residential subdivisions.

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[1] Source is Edmonton Metropolitan Regional Planning Commission and Appendix page A-7 of this report.

These factors largely explain the large increase in per capita operating expenditures from 1976 to 1981. As well, the comparatively high standards of the services provided, especially in the rural context, resulted in Strathcona having significantly higher 1981 per capita expenditure levels than other metropolitan-area rural municipalities.[1]

The overall effect was to accentuate the differences between Strathcona and other rural municipalities and to accelerate the county's transition from a basically rural municipality to, at the least, a 'semi-urban' municipality in which service levels and expectations are related more to an urban than rural environment. These trends are evident with respect to the changes in the major revenue and expenditure patterns, particularly for recreation, garbage collection, transportation and general government.

The 1981/82 Period

The trends from the late 1970's eventually entailed a major administrative re-organization in the early 1980's. Those reforms were prompted also by the realization that a significant portion of the county, including part of its vital industrial tax base, would be annexed by the City of Edmonton.

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[1] See Table 21 page 46 and Table 22 page 49 for example.

In some respects, the threat of annexation was of some advantage since it forced the county to evolve and implement a series of administrative and fiscal measures which better prepared it, at an earlier date, to meet the challenges imposed by the general economic recession. The rationalization of the provision of municipal services enabled the county to reduce significantly its overall expenditures from 1981 to 1982 while maintaining, for the most part, relatively high service standards.

The annexation which took effect in 1982 affected the demographic structure of the county. The population which was lost included many farmers (on much of the best agricultural land of the county), a large group of trailer court residents and some country-residential residents. As a consequence, Sherwood Park came to loom even larger in the overall county structure, while in the rural area the traditional farming population became even more dwarfed by the country-residential dwellers. Thus, while the annexation did not alter the underlying demographic trends, it did serve to accelerate them.

The political balance of the county also was influenced by the annexation. The long-term trend had been one of increasing representation of the urban interests of Sherwood Park (although the representation has always lagged behind what might be expected in terms of population distribution). This trend was accelerated by the loss of one rural electoral division through annexation, leaving the current county council comprised of four urban and four rural representatives.

The full impact of the annexation and the reforms implemented by the county cannot be assessed accurately from the review of the 1981 to 1982 period. In general terms, however, the reduction in overall expenditure levels, the increased reliance upon 'sales of goods and services' revenue and the re-evaluation of appropriate service standards are notable features. The underlying policy of expenditure restraint is likely to continue at least until the impact of the annexation losses (and the annual decreases in compensating provincial grants) are fully absorbed.

The Future

Presently, plans are being laid for a major new growth phase for Sherwood Park, involving an anticipated doubling of its population by early next century. But the full realization of these plans, which were formulated just prior to the current economic slowdown, must now be a matter of some doubt.

The water and sanitary sewage infrastructure necessary to service a greatly-expanded Sherwood Park is already in place. As has been noted in those service sections (see pages 232 to 234 and 244 to 246), a shortfall in new growth and development could complicate the repayment of the debts undertaken (although there are some reserve revenues available).

Sherwood Park has currently reached its originally designed capacity. Consequently, what growth that does occur in the short-to-medium term will likely be costly in terms of municipal services, there being limited scope for economies of scale except in the longer term. In addition, there will be new costs associated with the ageing of the present community, both in terms of its infrastructure and population.

A continuation of the rapid growth in the country-residential sector of the county could aggravate attempts to restrain service expenditure increases. If this type of growth declines, or was deliberately resisted, then it might be reasonably expected that the rural area would cease to generate high per capita cost increases.

There is potential for future industrial development in the county, especially in the Josephburg area, but it is by no means a certainty. The losses associated with annexation have already reduced sharply the proportion of the tax base represented by non-residential property, and if new urban growth occurs without an industrial tax base expansion the county will increasingly be required to rely upon revenues from residential property taxation.

The tax comparisons presented in this report indicate that residential taxation levels in the county are in the upper range exhibited by the comparison municipalities (see pages 32 to 35). At present, these levels are fully justifiable by the high standard of services provided but, nevertheless, there remains little scope for significant tax level increases.

It is anticipated that the county will pursue, at least for the next few years, ways and means of generating revenues from other than property taxation and of restraining service expenditure increases. As a consequence of its special urban/rural structure, the county will be obliged to consider the aspect of equitable municipal service benefits and costs to all its residents. It will also be required to review and justify the level of municipal services provided. Some of the findings of this report, which are discussed in following pages, should be of use in that regard.

B. SERVICE RANGE AND METHOD OF PROVISION

This section examines the range of municipal services in Strathcona County and the method by which they are provided. It is intended to identify some of the important general characteristics that may have been overlooked in the detailed service-by-service analysis.

Service Range

The range of municipal services available to residents of Strathcona is broadly in line with that provided in other large municipalities. This is especially the case for Sherwood Park in comparison with medium-size cities in Alberta. However, the rural population in Strathcona appears to be exceptionally served in a few specific respects.

The residents of Sherwood Park receive a fairly standard range of services, much as might be experienced in any other large urban centre in the province. Nothing exceptional may be identified, although there are certain functions, discharged elsewhere, which are absent from the range of services delivered by the County of Strathcona.

Certain municipalities are engaged in the provision of gas, electricity or telephone utility services to their residents, although these municipalities are the exception rather than the rule. The absence of these municipal activities in the Strathcona context constitutes nothing out of the ordinary, but signifies instead the general adequacy of existing means of provision.

Several of the sample urban municipalities indicate activity in the areas of public housing and in the subdivision and development of land. In Strathcona the nature of the Sherwood Park community ensures that there is little need for the municipal provision of public housing. Also, to date, competition between several private developers has been sufficient to ensure an adequate supply of reasonably priced and suitably subdivided land. The county has not therefore had to become active in this area.

Another notable omission in the Strathcona financial statement, in comparison with several others, is any activity in relation to storm water management. The county tackles this matter through developer's agreements with the result that the municipality is only responsible for some minor maintenance activity, the small costs of which are absorbed under the common services (public works) heading.

In Strathcona's case general 'community' services (function code 62) are basically agricultural services, despite the presence of Sherwood Park. In other urban municipal jurisdictions activity under this code can cover a grab-bag of services including mosquito control programs, tourism promotion, economic development, and public relations. No such specific activities occur in Stathcona's case although the county is in the process of establishing an economic development unit.

Rural municipalities tend to engage in a narrower range of services than urban municipalities. The County of Strathcona is unusual in that as an officially classified 'rural' municipality, it provides a comparatively wide and full range of services, including ambulance, fire protection, regional recreation facilities, bylaw enforcement officers, rural bookmobile service, preventive social services, and garbage collection services to the majority of the country-residential population.

Such services are not normally provided directly by rural municipalities and their availability in rural Strathcona can be attributed largely to the 'urban-lifestyle' of the extensive country-residential population and to the presence of Sherwood Park within the county. Rural residents of Strathcona can be considered exceptionally well provided with municipal services in comparison with residents of other rural municipalities.

The list of services available to rural Strathcona residents contains no significant ommissions. It may be noted however that a few rural municipalities have established their own police force to supplement the policing provided, at the province's expense, by the RCMP. The most advanced rural municipality in this respect is the County of Parkland, which is responsible for an area which is larger but similar to rural Strathcona.

Method of Service Provision

Most of the services to Sherwood Park residents are provided in a similar manner to that found in other large urban centres. This involves a mix of direct municipal delivery, selective contracting, and arrangements with other governments. About 40 per cent of the County of Strathcona's total discounted operating expenditures are for staff salaries and related benefits, and the current trend is for an increasing emphasis on direct municipal service delivery (see Table 116, page 342).

Nevertheless, a comparatively significant proportion of expenditures is for 'contracted and general services.' The proportion involved, though declining slightly between 1981 and 1982, is still relatively high in comparison with some other large urban centres (though relatively low in comparison with other rurals). Some of these expenditures involve private commercial operators, but others involve other governments, most notably the City of Edmonton.

The City supplies Strathcona with treated water, sewage treatment and garbage disposal facilities and transit-related services. In the past, the county has benefitted from the relatively low levels of charge stemming from the economies of scale associated with most of these services. But the county has no control over the setting of the rates charged, and lately these have been characterised by sharp increases at frequent intervals, complicating the budget process. As well, the availability of city services and facilities cannot be counted upon in the future, the current example being garbage disposal whereby Edmonton may not allow access by neighbouring municipalities to the planned replacement site for the present Clover Bar dump. Some uncertainty is therefore introduced into the county's planning processes.

Apart from the arrangements with the City of Edmonton, the Edmonton Metropolitan Regional Planning Commission and the Northeast Water Board, regional service agreements in Strathcona are not nearly as significant as in most other rural jurisdictions. Many rural municipalities have comprehensive inter-municipal agreements with near-by urban centres for services such as recreation, libraries, fire protection and ambulance. In Strathcona, these services are provided directly by the county itself, although some services, most notably ambulance and fire protection, involve mutual back-up support agreements with adjacent jurisdictions. In a sense however, Strathcona itself may be viewed as a very comprehensive and thoroughly integrated regional service delivery mechanism encompassing the urban centre of Sherwood Park and the surrounding rural areas of the county.

Finally, there are two other unusual aspects in Strathcona relating to the method of service provision. The distribution of water to Sherwood Park is through a franchise granted by the county to TransAlta Utilities (but this arrangement will end in December 1985 when the county will take over the service). Also, recreation services in Strathcona illustrate, within a single jurisdiction, both of the two main approaches to this service; that is, the direct, staff-intensive approach found in Sherwood Park, and the indirect approach, with its much greater reliance on volunteers and community groups, found in rural Strathcona.

Overall, the method of service provision in Strathcona features a paradoxical mixture of dependence and autonomy. In relation to a few key urban services the county is dependent to an unusual degree on another municipality (Edmonton), while much of the rural servicing involves an unusual measure of autonomy and the acknowledgement of a high level of self-responsibility.

C. SERVICE COST-EFFICIENCY AND COST-EFFECTIVENESS

In the individual service evaluations of Part III of this report, most services were rated on a seven-point scale in comparison with those provided in the sample municipalities. Where appropriate, comparisons were drawn on the basis of:

- the county as a whole in comparison with other municipalities in general,
- the urban component of the county (Sherwood Park) in comparison with similar-size urban municipalities, and
- the rural area of the county in comparison with other rural municipalities located in metropolitan fringe regions.[1]

Most of the services were evaluated on five main points:

- Service Level - basically a qualitative judgement, based on various aspects of a particular service, and on the comparative level or standard of the service provided.
- Service Cost - based upon per capita expenditures, the cost to taxpayers (essentially residential tax payers) and the cost to users through service charges and other non-tax revenue sources.
- Service Satisfaction - based primarily upon the results of the Burton survey conducted in 1979 (but see qualifier on page 8).
- Service Cost-Efficiency - a measure of value for money spent based upon the ratings for service level and service costs.[2]
- Service Cost-Effectiveness - a measure of the extent to which the service meets the needs and wants of residents based upon the ratings for service cost and service satisfaction.[3]

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[1] In particular, comparisons were made with the four cities (4C) of Fort McMurray, Grande Prairie, Red Deer and St. Albert, and with the five rural municipalities (5RM) of the counties of Leduc and Parkland and the MDs of Foothills, Rockyview and Sturgeon.

[2] For example a service with an 'above average' rating on level and 'below average' rating on cost would receive a 'high' or 'above average' rating on cost-efficiency.

[3] For example, a service with an 'above average' rating on cost and 'below average' rating on satisfaction would receive a 'low' or 'below average' rating on cost effectiveness.

The purpose of this present section of the report is to construct a more integrated assessment of the municipal services in Strathcona with particular focus upon their cost-efficiency and cost-effectiveness. The specific service sections of Part III should be consulted for further detail. As well, the general qualifier that there is no other municipality in Alberta quite like Strathcona County should be kept in mind when the comparisons are discussed.

The following sections are accompanied by tables which summarize the ratings of each of the services. Note that the general government function has been evaluated in the two categories of legislative service (i.e. the county council) and general administration. No evaluation is presented for planning services due to the current changes underway for that particular service (see pages 273 to 287). For ambulance, bylaw enforcement and agricultural services, there were no suitable public opinion data available, thereby precluding a rating for public satisfaction and service cost-effectiveness.

Service Level (Table 118)

Of the services rated in terms of the entire county, only one - ambulance - is rated as lower than comparable averages in terms of level of service. This low rating is due to the inadequate training of the ambulance personnel, a deficiency which the county intends to rectify during 1983.

High service level ratings are given for transportation, recreation and library services with above average ratings for police and fire

TABLE 118

Summary of Service Level Ratings

	Sherwood Park	Rural Areas	Entire County
Legislative Service	Average	Average	Average
General Administration	Average	Above Average	Average
Police Protection	High	Average	Above Average
Fire Protection	Average	High	Above Average
Ambulance	Low	Below Average	Low
Bylaw Enforcement	Average	Average	Average
Transportation	High	Very High	High
Public Transit	Below Average	n.a.	n.a.
Garbage	Average	Very High[1]	Above Average
Water Service	Average	Low[2]	n.a.
Sewage Service[3]	Above Average	n.a.	n.a.
FCS[4]	Above Average	High	Above Average
ASB Services[5]	n.a.	Average	n.a.
Recreation	High	Very High	High
Library	High	Very High	High

Notes: Possible ratings are very high, high, above average, average, below average, low, very low.

n.a. means not applicable.

[1] Refers to rural areas with a garbage collection service. Those without one would be rated average.
[2] Refers to Ardrossan and Josephburg systems. For those rural residents who tap-in to the Northeast Water Board line or receive a service from TransAlta the rating would be very high.
[3] Refers to sanitary sewage service only, not to storm sewers.
[4] FCS means Family and Community Services.
[5] ASB means Agricultural Service Board.

protection, garbage collection and disposal and family and community services (FCS).

The county pattern regarding service level is essentially repeated in the Sherwood Park context, although public transit as well as ambulance is rated less than average. The public transit service is presently the subject of a special study to investigate the feasibility of the county operating its own system rather than relying so much on the City of Edmonton.

For the rural areas of the county, service level ratings are in several cases a notch higher than those for Sherwood Park or the county as a whole; for instance, transportation, garbage collection, general administration, recreation and library. This feature relates to the comparative base for the rural areas which is other rural municipalities in which the normal or average service level is much lower than that provided in Strathcona County. The only services rated below average are ambulance and the water service for the hamlets of Josephburg and Ardrossan (although other rural areas receiving water services by 'tapping-in' to main distribution lines would receive a very high rating on service level).

In general terms, the overall municipal service level provided by the county is better than that provided in most comparison municipalities, especially in regard to the services available in the rural components of the county.

Service Cost (Table 119)

For the entire county, service cost ratings cluster around the average with no services rated as high cost and with only the recreation cost to taxpayers rated as low.

Above average costs are noted for fire protection, garbage services, FCS and libraries, but all of those services have above average or higher service level ratings. Below average cost ratings are given for the legislative services, police protection and ambulance, and it is only for the ambulance service where the below average costs relate to a below average service level.

For Sherwood Park, more of the services are rated as having below average costs with some - such as police protection, fire protection, transportation and taxpayer costs for public transit and recreation - receiving low or very low ratings. These ratings generally pertain to the fact that the net costs of services are financed through taxation throughout the entire county which provides a much larger assessment base than that normally available for urban centres. Above average costs are noted for public transit users and for the above average services of FCS and library. The only high cost rating is for the sewage service due to the level of user charges imposed.

In the rural area, several services receive a high cost rating, including police and fire protection, transportation, garbage and recreation services. With the exception of police protection (for which rural residents pay for the Sherwood Park service), the high cost ratings are for services with high or very high service level ratings. Lower than average costs are present for the legislative service, the water user charges for Josephburg and Ardrossan, and for agricultural services.

In overall terms, the service cost ratings only partially reflect the rather high service level ratings. In the individual service analysis

TABLE 119

Summary of Service Cost Ratings

	Sherwood Park	Rural Areas	Entire County
Legislative Service	Below Average	Low	Below Average
General Administration	Average	Above Average	Average
Police Protection	Very Low	High[4]	Below Average
Fire Protection	Low	High	Above Average
Ambulance	Below Average	Average	Below Average
Bylaw Enforcement	Average	Average	Average
Transportation	Low	High	Average
Public Transit			
- users	Above Average	n.a.	n.a.
- t.p.	Very Low	n.a.	n.a.
Garbage	Below Average	High	Above Average
Water Service	Average	Very Low[5]	n.a.
Sewage Service[1]	High	n.a.	n.a.
FCS[2]	Above Average	Above Average	Above Average
ASB Services[3]	n.a.	Below Average	n.a.
Recreation			
- users	Average	Average	Average
- t.p.	Low	High	Low
Library	Above Average	Above Average	Above Average

Notes: See Table 118 for possible ratings.
n.a. means not applicable.
t.p. means taxpayers.

[1] Refers to sanitary sewage service only, not to storm sewers.

[2] FCS means Family and Community Services.

[3] ASB means Agricultural Service Board.

[4] Rating based not on service received but the fact that rural residents pay through taxation for net costs of the RCMP service in Sherwood Park.

[5] Refers to cost to users of Ardrossan and Josephburg systems.

sections, it has been mentioned that for services such as general government, transportation, and recreation the integrated rural/urban structure of the county enables some cost savings, especially in terms of administration and staffing, thereby enabling above average service levels to be provided at below average or average cost levels.

Service Satisfaction (Table 120)

The results of the 1979 Burton survey (at times supplemented by other sources) indicate good levels of public satisfaction for the county as a whole, with average to high ratings for all service categories.

The ratings for Sherwood Park on its own are even more favourable especially for police and fire protection, and garbage and water services.

The rural area ratings, on the other hand, are in several cases lower than that for Sherwood Park or for the entire county. This is particularly noticeable for transportation where a below average satisfaction rating occurs for the service which is rated as having a very high service level. The only service more highly rated in terms of satisfaction in the rural areas than in Sherwood Park is the legislative service. This likely reflects the county council distribution at that time which was five rural representatives to four from Sherwood Park.

Throughout the analysis of the Burton survey data it was often noted that the lowest levels of satisfaction were expressed by the country-residential residents. This feature may be attributable to those residents drawing comparisons with urban centre services rather than with what would be normal in a rural setting. The traditional rural residents

TABLE 119

Summary of Service Cost Ratings

	Sherwood Park	Rural Areas	Entire County
Legislative Service	Below Average	Low	Below Average
General Administration	Average	Above Average	Average
Police Protection	Very Low	High[4]	Below Average
Fire Protection	Low	High	Above Average
Ambulance	Below Average	Average	Below Average
Bylaw Enforcement	Average	Average	Average
Transportation	Low	High	Average
Public Transit			
- users	Above Average	n.a.	n.a.
- t.p.	Very Low	n.a.	n.a.
Garbage	Below Average	High	Above Average
Water Service	Average	Very Low[5]	n.a.
Sewage Service[1]	High	n.a.	n.a.
FCS[2]	Above Average	Above Average	Above Average
ASB Services[3]	n.a.	Below Average	n.a.
Recreation			
- users	Average	Average	Average
- t.p.	Low	High	Low
Library	Above Average	Above Average	Above Average

Notes: See Table 118 for possible ratings.
n.a. means not applicable.
t.p. means taxpayers.

[1] Refers to sanitary sewage service only, not to storm sewers.
[2] FCS means Family and Community Services.
[3] ASB means Agricultural Service Board.
[4] Rating based not on service received but the fact that rural residents pay through taxation for net costs of the RCMP service in Sherwood Park.
[5] Refers to cost to users of Ardrossan and Josephburg systems.

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TABLE 120

Summary of Service Satisfaction Ratings

	Sherwood Park	Rural Areas	Entire County
Legislative Service	Above Average	High	Above Average
General Administration	Average	Average	Average
Police Protection	High	Average	Above Average
Fire Protection	High	Average	Above Average
Transportation	Above Average	Below Average	Average
Public Transit	Average	n.a.	n.a.
Garbage	Very High	High[3]	High
Water Service	High	Low[4]	n.a.
Sewage Service[1]	Average	n.a.	n.a.
FCS[2]	Average	Average	Average
Recreation	High	High	High
Library	High	High	High

Notes: see Table 118 for possible ratings.
n.a. means not applicable.
No satisfaction ratings available for ambulance, bylaw enforcement and agricultural services.

[1] Refers to sanitary sewage service only, not to storm sewers.
[2] FCS means Family and Community Services.
[3] Rating refers to those rural residents receiving a collection service. For those that do not, the rating would be average.
[4] Refers to users of Josephburg and Ardrossan systems only.

usually expressed much higher satisfaction than those on acreages or in country-residential subdivisions.

Service Cost-Efficiency (Table 121)

The service level and cost ratings have been combined to arrive at the rough ratings of service cost-efficiency summarized in Table 121.

For the entire county, the majority of services receive above average ratings on cost-efficiency with the legislative service and recreation in particular being highly rated. Low cost-efficiency is noted for the ambulance service because a major improvement in the service, through staff training, could be achieved at a very reasonable cost. Bylaw enforcement receives a below average rating because a comparatively small amount of the service expenditure is paid through user charges or licence and fees revenues.

The efficiency ratings for services in Sherwood Park are generally higher than those for the remainder of the county, most notably for police and fire protection, transportation, public transit (taxpayers) and recreation. However, additional ratings below average, aside from those for ambulance and bylaw enforcement, occur for public transit users and the sanitary sewage service. Those service efficiency ratings reflect the relatively high user charges which are levied.

In the rural parts of the county, the most noticeable differences from the Sherwood Park ratings are for police protection, where the low rating reflects the rural taxpayers' burden for Sherwood Park services, and for transportation and fire protection where the average ratings

TABLE 121

Summary of Service Cost-Efficiency Ratings

	Sherwood Park	Rural Areas	Entire County
Legislative Service	Above Average	High	High
General Administration	Above Average	Average	Average
Police Protection	Very High	Low[1]	Above Average
Fire Protection	High	Average	Above Average
Ambulance	Low	Below Average	Low
Bylaw Enforcement	Below Average	Below Average	Below Average
Transportation	Very High	Average	Above Average
Public Transit			
- user	Low	n.a.	n.a.
- t.p.	High	n.a.	n.a.
Garbage	Above Average	Above Average[2]	Above Average
Water Service	Average	Below Average[3]	n.a.
Sewage Service[4]	Below Average	n.a.	n.a.
FCS Services[5]	Average	Above Average	Average
ASB Services[6]	n.a.	Above Average	n.a.
Recreation	Very High	High	Very High
Library	Above Average	Above Average	Above Average

Notes: see Table 118 for possible ratings.
n.a. means not applicable.
t.p. means taxpayer.

[1] Low rating based not on service performance but on the fact that rural residents pay through taxation for the net costs of the service generated by Sherwood Park.

[2] The rating is for rural areas with a collection service; for those without the rating is Low.

[3] The rating pertains to the Ardrossan and Josephburg services only.

[4] Refers to sanitary sewage service, not to storm sewers.

[5] FCS means Family and Community Services.

[6] ASB means Agricultural Service Board.

reflect the high cost of the high service levels provided. As well, the legislative service is rated as more cost-efficient than in Sherwood Park while the agricultural services are rated above average.

Service Cost-Effectiveness (Table 122)

The service cost and satisfaction ratings have been combined to arrive at a measure of cost-effectiveness.

For the county as a whole, most services are rated as above average with recreation, police protection and legislative services receiving high or very high ratings. A few services are rated as 'only' average but these include the major expenditure areas of transportation and general administration.

In the context of Sherwood Park, the vast majority of the services register levels of cost-effectiveness which are above average or, more impressively, high or very high. A notable exception is public transit (users) which is rated below average, and FCS and general administration which are rated as average.

A more mixed picture exists for the rural areas with average ratings predominant. The most notable variations from the Sherwood Park ratings are the average, rather than very high, ratings for police protection and garbage services, and the low, rather than high, rating for transportation - the single most costly service especially in the rural parts of the county.

TABLE 122

Summary of Service Cost-Effectiveness Ratings

	Sherwood Park	Rural Areas	Entire County
Legislative Service	High	Very High	High
General Administration	Average	Average	Average
Police Protection	Very High	Average	High
Fire Protection	High	Average	Above Average
Transportation	High	Low	Average
Public Transit			
- users	Below Average	n.a.	n.a.
- t.p.	High	n.a.	n.a.
Garbage	Very High	Average[1]	Above Average
Water Service	Above Average	Below Average[2]	n.a.
Sewage Service[3]	Above Average	n.a.	n.a.
FCS Services[4]	Average	Average	Average
Recreation	Very High	High	Very High
Library	Above Average	Above Average	Above Average

Notes: see Table 118 for possible ratings.
n.a. means not applicable.
t.p. means taxpayer.
Effectiveness ratings for ambulance, bylaw enforcement and Agricultural Services excluded due to absence of public satisfaction ratings.

[1] Rating is for rural areas with a collection service; for those without the rating is below average.

[2] Rating pertains to Ardrossan and Josephburg services only.

[3] Refers to sanitary sewage service, not storm sewers.

[4] FCS means Family and Community Services.

Cost-Efficiency and Effectiveness Discussion

Considered overall, there are very few services in Strathcona County which consistently registered below average levels of cost-efficiency or cost-effectiveness. The ratings presented, however, and the variations in the ratings between the urban and rural areas indicate room for some specific improvements.

In terms of services to the entire county, candidates for attention in regard to cost-efficiency are ambulance and bylaw enforcement. Service level improvements are recognized for ambulance, while the net cost for bylaw enforcement (while small in terms of the total services) might be reduced somewhat through user charge and other non-tax revenue.[1]

General administration and FCS receive average ratings but in relation to other services evaluated those ratings may be deemed as 'only average' and perhaps inadequate given the county's overall high standard of performance.

The assessment of general administration in this report must be considered rather cursory in comparison with what might be achieved by a specialized management study, and it is recognized that recent administrative reforms are not fully reflected in the data used. Nevertheless, considering that the service accounts for in excess of 20 per cent of total discounted net expenditures (1982) and involves significant debt repayment expenses as well (see pages 331 and 332), even minor improvements in cost-efficiency could be significant.

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[1] However, the argument for encouraging compliance with bylaws rather than penalization for infractions is recognized. See page 127 to 129.

For family and community services, the rather high level of the service is recognized but cost reductions could arise from efforts to encourage greater participation by local community organizations (as in St. Albert, for example).

In terms of the services specific to Sherwood Park, public transit warrants (and is currently receiving) some attention related to service improvements. The cost of certain improvements may be more than offset by increased ridership, perhaps enabling the county to minimize transit fare increases and improve service satisfaction levels.

The sanitary sewage service has relatively poor cost-efficiency ratings because of the comparatively high rate of user charges now in effect. It could be that rate increases are overdue in some of the comparison municipalities and it is recognized that the quality of sewage treatment at City of Edmonton facilities is above comparable standards. Nevertheless, efforts to minimize future user charge increases for the sewage service could improve its cost-efficiency (although the cost associated with Edmonton treatment facilities is out of the county's hands).

The ratings in the rural areas for many services are slightly below that for Sherwood Park. For some services, such as fire protection, the ratings are a consequence of high costs involved for a high level of service. Cost-cutting measures would likely entail a lower service level and that is undesirable. The recent efforts by the county to expand its mutual aid agreements with adjacent municipalities appears to be the sensible route for providing the service, especially to rural fringe areas, without drastically escalating costs. Service satisfaction by rural residents might be expected to improve.

High costs for a high service level in rural areas are also associated with transportation services. Specifically in regard to rural road maintenance, the recent policy of reducing the unusually large mileage of 'oiled' roads should lead to significant cost reductions. It might be expected that the already relatively low satisfaction ratings from rural residents would decline reducing even further the rating for cost-effectiveness. But if the alternative of significant tax increases, and the comparatively high standard of rural road maintenance were explained, public understanding, especially from country-residential residents, might improve.

The garbage service is a prime candidate for service rationalization especially in the rural areas. The cost-efficiency, although rated as above average, could be improved by a more economic operation of the county's disposal facilities at Ardrossan and Josephburg (where per tonnage costs are far above the norms). Also, note that the cost-efficiency and effectiveness ratings presented are those which relate to rural areas in the county that receive a collection service. Other rural areas do not. It is suggested that the implementation of user charges be examined to remove the service as a burden on general taxation and to eliminate inequitable cost burdens.

The water service at Josephburg and Ardrossan warrants service level improvements. These improvements, however, should only be those for which the hamlet residents are willing to pay for through user charges. The water and sewage service provided should be paid for, as in

Sherwood Park, by users and not through general taxation (although some small level of general tax subsidy might be warranted in recognition of the lack of economies of scale in small urban concentrations).

There is little that can be done to improve the low rating of cost-efficiency for police services in the rural areas. The Sherwood Park service requires support from general taxation and all county taxpayers, whether in Sherwood Park or not, are liable to the same taxation. There is no potential for alternative revenue sources to reduce the evident cost burden inequity.

Notwithstanding the above qualifications, the County of Strathcona is clearly a highly successful municipal operation on the strictly economic grounds of cost-efficiency and cost-effectiveness. Both the urban and rural components of the county are very well-served, the rural areas particularly so in comparison with what is normal in rural municipalities.

A large part of the evident success of the county must be attributed to its unique structure (for Alberta), integrating rural and urban concerns in one municipal administration. The economies of scale and general system efficiencies inherent in the integrated arrangement have helped to enable a rather high level of service at a reasonable (although by no means low) level of residential taxation.

Some of the success must also be attributed to the legacy of a relatively strong non-residential assessment base. Recently, however, that tax base has been eroded by annexation and due to the general economic slowdown it is growing at a much slower rate than before. Therefore, improvements in service cost-efficiency and cost-effectiveness are perhaps more important now and in the immediate future than in the recent past.

D. SERVICE COSTS - URBAN/RURAL DISTRIBUTION

The examination of individual municipal services in Part III of this report included a calculation of net service costs and, for some services, a rough estimation of the distribution of these costs between the urban (Sherwood Park) and rural parts of the county. In this section, aggregated net costs are examined and consideration is given to the cost/benefit balance between the urban and rural components.

The net costs used are those calculated in the course of this study. The costs, including those for debt charges and net expenditures on transfers, have been presented earlier. (See Tables 107 to 109, pages 330 to 332.)

Allocation of Net Costs

The allocation of net costs between the urban and rural components of the county is determined in different ways depending on the service. In most cases, it is based on the estimates developed in the examination of individual services. Where specific costs could not be isolated an estimated percentage split is used based on the service analyses. Where it was concluded that there is an equitable distribution of costs, net costs are allocated on a per capita basis.

The net operating costs so allocated are those presented in Table 107 (page 330) plus the net expenditure for transfers and other internal fund adjustments presented in Table 109 (page 332).

The expenditures required for debt charges (Table 109 page 332) are allocated for each service on the basis of the location of the facility or roadway or the purpose of the equipment for which debt repayments are required. The source used in estimating these allocations is the County of Strathcona 1983 Municipal Debenture Retirement Schedule (adjusted to exclude for 1981 those debts undertaken in 1981 and 1982 and adjusted for 1982 to exclude those debts undertaken in 1982).

A portion of the net costs for certain services is allocated to the non-residential (mainly industrial) sector. It is considered that industry makes no appreciable demands on services such as recreation, garbage, public transit, library, family and community services and agricultural services. Industry does benefit from water and sewer services but the 'user-pay' policy ensures that net costs are negligible. In the case of policing, almost all of the non-residential property is in the rural area so policing costs are borne by the province, not the county.

Industry does make some demands on fire and ambulance services. Data presented earlier (see pages 97 and 113) indicate that two per cent of fire calls and six per cent of ambulance calls are due to the industrial area.

The most significant direct service demands generated by industry relate to transportation and general government. The transportation item is important in dollar terms because of the magnitude of expenditures on this service. But much of the industry is located along primary highways which are a provincial responsibility, and it is estimated from trial balance data that only about four per cent of net transportation costs are due to the industrial area.

There remains the question of the proportion of general government net costs which might be directly attributable to non-residential development. Because of the relative ease of administering such development it is estimated that a reasonable proportion of the net costs to be allocated is in the range of 10 to 15 per cent.[1]

Table 123 summarizes the method of allocating the costs associated with each service.

Urban/Rural Net Costs

The net cost and debt charges for each service in 1982 are allocated as shown in Table 124. Notice that disaster services and the sewage service show net gains in their operation. The total cost for the county of $21,248,600 does not include the expenditure of $2.5 million for 'operating contingency reserve' (see page 334).

Table 125 shows the population, assessment, taxation and net costs distribution in percentage terms.

It is evident that the industrial area generates much more in tax revenue than in servicing costs (over 30 per cent of county taxes but only 6 per cent of net costs). This general pattern of industrial development subsidizing the cost of services is quite normal for most municipal operations.

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[1] If net costs are allocated in proportion to assessment, around 46 per cent of these costs for 1981, and 37 per cent for 1982, might be attributable to non-residential development. However, if the costs are allocated on the basis of the proportion of non-residential assessment parcels the relevant percentages are almost insignificant (4.1 per cent in 1981, and 2.8 per cent in 1982). (The latter do not reflect any allowance for pipe and power assessment.) These two sets of percentages would appear to be extremes in a range. It has been assumed that non-residential development accounts for 12 1/2 per cent of the total net costs of general government.

TABLE 123

Strathcona County Net Cost and Debt Charge Allocation Method for Urban, Rural and Industrial Areas, for 1982

	Net Cost Allocation[1]	Debt Charge Allocation
General Government[2]	12.5% industrial area; Rest on per capita	per capita
Police Protection	100% urban	100% urban
Fire Protection[3]	2% industrial area; Rest as 85% urban, 15% rural	10% industrial, 90% urban
Disaster Services	per capita	n.a.
Ambulance	6% industrial area, 64% urban, 30% rural	n.a.
Bylaw Enforcement	25% urban, 75% rural	n.a.
Transportation[4]	4% industrial area, 26% urban, 70% rural	92% urban, 8% rural
Public Transit	92% urban, 8% rural	92% urban, 8% rural
Garbage	57% urban, 43% rural	n.a.
Water[5]	32.6% industrial area; 67% urban, 0.4% rural, net costs for small hamlets	20% industrial, 80% urban
Sewage[6]	5% industrial area, 95% urban, net costs for small hamlets	5% industrial, 95% urban
FCS	70% urban, 30% rural	n.a.
ASB	10% urban, 90% rural	n.a.
Recreation	70% urban, 30% rural	100% urban
Library	per capita	n.a.

Notes: FCS means Family and Community Services.
ASB means Agricultural Service Board.
n.a. means not applicable because there were no debt charges.

[1] includes 'net expenditure' as per Table 107 page 330 plus 'Net Transfers and Other expenditures' as per Table 109 page 332.

[2] Debt for general government includes only $18,300 for health unit building. Rest of general government debt listed in Table 109 page 332 is due to re-allocation of water and sewer debts. These are included under the water debt allocation.

[3] Net cost split based on 90% of staff costs as urban (for full-time firefighters) with rest of net costs (17% of total) allocated on basis of fire calls. Debt allocation is for articulated aerial platform for Sherwood Park and industrial area.

[4] Net cost allocation calculated from trial balance data. Debt allocation based on location of roadways for which debt payments are made.

[5] Net cost allocation based on water consumption data. Net cost amounts reduced by amount due to deficits at Ardrossan and Josephburg. Debt charge allocation based on specific water line purposes. Debt amounts include that re-allocated from general government function.

[6] Net cost allocation based on treatment charges levied by City of Edmonton. Net costs amounts reduced by deficit amounts for Josephburg and Ardrossan.

TABLE 124

Strathcona County Net Cost and Debt Charge Allocations to Urban, Rural and Industrial Areas, by service categories, for 1982

	in thousands of dollars			
	Industrial Area	Sherwood Park	Rural Areas	TOTALS
General Government	624	2,719	1,667	5,010.0
Police Protection	nil	808.5	nil	808.5
Fire Protection	29.8	1,109.5	189.2	1,328.5
Disaster Services	nil	-3.1	-1.9	-5.0
Ambulance	14.1	150.6	70.6	235.3
Bylaw Enforcement	nil	28.5	85.5	114.0
Transportation	366	2,781	6,440	9,587.0
Public Transit	nil	499.1	43.4	542.5
Garbage	nil	374	282	656.0
Water	23	712	27	762.0
Sewage	-11	-211	31	-191.0
FCS	nil	64.4	27.6	92.0
ASB	nil	9.4	84.6	94.0
Recreation	nil	1,288.8	433.2	1,722.0
Library	nil	305.6	187.4	493.0
TOTAL	1,045.9	10,636.3	9,566.6	21,248.6

Note: Net costs include net transfers and other expenditures.

Source: Data from Tables 107 and 109 calculated on basis of Table 123.

TABLE 125

Per Cent of Totals for Population, Assessment, Taxes Generated, and Net Cost and Debt Charges by service category and in total; by Industrial, Urban and Rural Areas

	Per Cent of County Totals			
	Industrial Area	Sherwood Park	Rural Areas	Service as Per Cent of County Total
POPULATION	nil	62.1	37.9	
TOTAL ASSESSMENT[1]	28.4	43.3	28.3	
(Residential Only)	(nil)	(56.6)	(43.4)	
MUNICIPAL TAXES[2]	32.8	41.6	25.6	
TOTAL NET COST AND DEBT CHARGES	6.0	49.1	44.9	
($'s per capita)	n.a.	($357)	($526)	
NET COST AND DEBT CHARGES BY SERVICE				
- General Gov't.	12.5	54.3	33.3	23.6
- Police	nil	100.0	nil	3.8
- Fire	2.2	83.5	14.2	6.3
- Disaster	nil	(62.1)	(37.9)	-0.02
- Ambulance	6.0	64.0	30.0	1.1
- Bylaw Enf.	nil	25.0	75.0	0.5
- Transportation	3.8	29.0	67.2	45.1
- Public Transit	nil	92.0	8.0	2.6
- Garbage	nil	57.0	43.0	3.1
- Water	3.0	93.4	3.5	3.6
- Sewage	(-5.6)	(-110.5)	16.2	-0.9
- FCS	nil	70.0	30.0	0.4
- ASB	nil	10.0	90.0	0.4
- Recreation	nil	74.8	25.2	8.1
- Library	nil	62.1	37.9	2.3

[1] Estimates only. All commercial property grants-in-lieu and cable TV allocated to Sherwood Park. All pipe and power and industrial assessment allocated to industrial area. All farm and railway property allocated to rural areas. 56.6 per cent of residential assessment to Sherwood Park and 43.4 per cent to rural areas (estimates from county assessment department).

[2] Split mill rate used is 62.09 on residential and 79.34 on non-residential. Includes planning and health requisitions.

Source: Financial Statements, Appendix Table II-1 page A-7 and Table 124.

Both Sherwood Park and the rural areas receive significant benefit from the industrial area taxes but notice that the benefit (as illustrated by the difference between percentage of taxes and percentage of net costs) is much greater for the rural areas. The per capita net cost for the rural area is almost 50 per cent higher than that for Sherwood Park, reflecting the high level and high cost of rural services discussed in the previous section.

The overall result is that Sherwood Park with 62 per cent of the county population accounts for less than 50 per cent of net costs while the rural area with 38 per cent of the population accounts for 45 per cent of net costs.

In terms of the proportions of individual services represented by the three components, there is no service where the percentage of net cost conforms to the percentage of taxes generated.

The percentage of net cost roughly parallels the population percentages in the services of ambulance, garbage, and library, and in recreation and FCS if it is considered that rural residents nearby Sherwood Park would probably utilize Sherwood Park facilities rather than rural ones. Those services combined account for about 15 per cent of total service costs. Sherwood Park clearly has a cost benefit for the services of police and fire protection, public transit and water.

The police service benefit is due to the fact that the rural areas are served by RCMP which are paid for by the provincial government, while Sherwood Park is served by RCMP which are primarily paid for by the municipality, that is, the entire county.

The fire service benefit is attributable to full-time firefighters based in Sherwood Park while the rural detachments are manned by much less-costly volunteers.

The public transit service is essentially intended primarily for urban residents. It should be noted, however, that the rural area receives a major benefit in terms of school busing transportation with Sherwood Park accounting for only about 12 per cent of that school service cost (see page 179).

The water service benefit pertains entirely to the associated debt charges most of which are a charge on general taxation. The actual operation of the water service in Sherwood Park in fact generates a surplus from user charges (see Table 109 page 332).

The services for which there appears a cost benefit for Sherwood Park account for about 16 per cent of total service costs.

The services for which the proportion of net costs generated in the rural areas exceeds the proportion of tax revenue generated or the proportion of the population include bylaw enforcement, ASB services and transportation.

Bylaw enforcement and agricultural services combined account for less than one per cent of total net costs, but transportation alone represents over 45 per cent. This is the service in which the rural area residents clearly receive a major cost benefit.

Net Cost Distribution

It has been noted that 1982 per capita net costs in the rural areas were some 50 per cent higher than those in Sherwood Park. But in comparison with 1981 data the disparity appears to be decreasing. Per capita net costs generated by the rural area increased by only 4.2 per cent between 1981 and 1982 while they increased by 15.1 per cent in Sherwood Park. Had the annexation not resulted in such a major reduction in the rural population, it is conceivable that an absolute decline in rural per capita costs might have been attained.

Thus while the rural residential taxpayer may seem to be getting an especially good deal out of the current situation (accounting for a 50 per cent higher per capita level of costs but paying taxes on the basis of a standard county-wide mill rate) these circumstances may not continue. And though the existing integrated urban/rural structure may appear to be unfavorable to urban taxpayers they will increasingly be in need of this structure to share the rising proportion of net costs which they can be expected to generate in the near future.

It is important to appreciate that the current relatively low per capita net costs in Sherwood Park are in large part a consequence of the relative newness of the community, and of the recent full realization of several economies of scale. Yet Sherwood Park is in the process of crossing a key threshold. It was initially designed with a population of around 30,000 in mind, and this level has now been reached. The expansion (to more than double the present population by the early decades of the next century) which is now being initiated will involve considerable front-end costs and, until anticipated levels of future development materialize, little in the way of economies of scale will be realized.

In addition there will be costs associated with the ageing of the existing Sherwood Park community. Whereas much of the present infrastructure was installed by developers with little or no municipal costs, this infrastructure will begin to deteriorate in the coming years, requiring extensive repair and replacement work and involving significant municipal costs.

A further factor working in Sherwood Park's favour in recent years is the fact that its population growth slowed considerably in the late 1970's, after massive growth in the early part of that decade. By 1981/82 the county had come to terms with the high costs of coping with such rapid urban growth, and was enjoying the greater manageability of much more settled conditions.

However the county still had a costly rapid-growth situation to cope with in the rural area. The rural population registered larger increases not only in the first part of the 1970's but especially in the late 1970's. This particular form of growth could not be planned for in such an effective manner as was possible in Sherwood Park, and as a result each new residential unit tended to constitute a significant marginal cost increment. In the Sherwood Park context by contrast the same unit would have been more important for its contribution to economies of scale.

At present there are in the order of 2700 approved but undeveloped country residential lots available. There is therefore considerable scope for the recent high rate of rural growth to continue. Depending on the location of lots, and whether advantage can be taken of already existing infrastructure, the associated new population could contribute to a greater realization of economies of scale in the rural context. However, the additional costs consequent upon too rapid growth could also cancel out this factor. Nevertheless it seems likely that the rural area will at least be characterized by a lower rate of increase in the costs which it generates.

Overall the probable trend in the short to medium term will be one of a fairly rapid convergence in the level of per capita net costs generated by the urban and rural parts of the County. By contrast the period studied here appears to have been characterized by maximum divergence.

E. MUNICIPAL SERVICES AND LOCAL GOVERNMENT ARRANGEMENTS IN STRATHCONA COUNTY

There are two significant factors in the County of Strathcona which greatly affect the level and type of services relative to other Alberta municipalities.

One is that Sherwood Park, with an urban population of about 30,000, has not been incorporated as an urban municipality. It remains a hamlet and as such it is part of a rural municipality. In all other parts of Alberta, incorporated urban centres are governed by councils elected by an urban population, and incorporated rural areas are governed by councils elected by a rural population. Strathcona County is unique (in the Alberta context) of being governed by a council which represents both urban and rural residents.

The other factor is that the rural population of the county is comprised primarily (76 per cent) of country-residential residents living on small acreages or in country-residential subdivisions. No other rural municipality has such an extensive residential population. Consequently, the type of services provided by Strathcona County, especially in its rural areas, are considerably different than other rural municipalities.

Previous sections of this part of the Main Report have discussed the nature of services in the county, their level and cost and their relative benefits to the urban and rural components. This final section examines some of the advantages and disadvantages inherent in the integrated rural/urban structure of the county.

Advantages

The most significant advantage of the present local government arrangement is that, according to the needs of each, the urban and rural areas can share the tax revenues derived from the considerable assessment of the industrial area of the county. This has permitted a relatively high level of services, particularly in the rural areas, at a reasonable level of residential taxation.

If separate urban and rural municipalities were to replace the present county, difficulties would arise in determining an equitable allocation of the industrial tax revenues.

A second advantage is that services can be provided to both the urban and rural areas through decisions of a single municipal council. In most other rural municipalities in Alberta, services such as fire protection, ambulance, recreation and libraries are provided through inter-municipal agreements with near-by urban municipalities. These regional type of service arrangements, while often the most economical and sensible means of provision, are dependent upon agreements and periodic renewals of agreements among two or more separate municipalities. The integrated structure of Strathcona County enables it to provide these 'regional' type of services on its own.

A third advantage is that the integrated service provision enables a realization of significant economies in scale and in avoidance of duplication. Significant cost savings have been identified in this report which are directly attributable to the fact that urban and rural areas are serviced by one administration. If the urban and rural parts were separately incorporated there would be need for two councils, two public works departments, two administrative offices and staff complements, etc. Also, the combined population size of Sherwood Park and the rural area of the county enables a level for certain services which would not be attainable or economical if the areas were separately governed.

The economies realized through the local government arrangement could be used to lower taxes or to increase the level of service. In general, this study indicates that Strathcona has used the 'savings' to provide a higher level and broader range of services than is common in other rural municipalities. The presence of Sherwood Park has resulted in the county endeavouring to provide a high, almost urban-level of services to its rural residents to ensure that both components of the county are well served.

The extent of the advantages of the present municipal arrangement may be assessed, in part, by the satisfaction or dissatisfaction of county residents. Various public opinion polls conducted in the county, including the 1979 poll used in this report, have indicated a rather high level of approval of most individual services and of the county administration in general.

Disadvantages

There are two main disadvantages in the present local government structure of the county. One relates to how the county is viewed for purposes of provincial grants and requisitions and service responsibilities, the other to uncertainties about the long-term viability of the county.

In regard to grants, the provincial system of grants to municipalities is geared to standard municipal arrangements with specific grants for specific types of municipalities. Strathcona County is technically a rural municipality, but effectively it is a municipality which includes a city and a densely-populated rural area.

There is no consistency among the various provincial departments which provide municipal grants as to how to treat Sherwood Park and the rural area of the county for the purposes of calculating the grants. For example:

- For urban transportation grants, Sherwood Park is considered simply part of a rural municipality and is therefore not eligible for the monies available to cities through the Urban Transportation Assistance Program, except for the public transit portion.[1]
- For rural road maintenance grants, the calculation presently used includes the assessment within Sherwood Park but not its population. As a result the county appears to be receiving less money than if Sherwood Park were completely excluded. (See pages 151 to 153.)
- For grants for family and community services, given primarily on a per capita basis, the entire county is considered a city. The grant would be considerably larger if only Sherwood Park were treated as a city and the rural area were treated as a rural municipality or if the entire county were treated as a rural municipality. (See pages 251 to 252.)
- For purposes of the Municipal Assistance Grant the entire county is treated as a rural municipality. The amount of the grant would likely be larger if Sherwood Park were considered an urban centre and if the grant were calculated separately for the urban and rural components.

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[1] See pages 149-150. The Program provides grants only to cities, thereby excluding Sherwood Park as well as those towns which are eligible for city status (it requires a population of 10,000) but have remained as towns. A change to city status also makes the municipality responsible for any formerly designated provincial highways within its boundaries.

In regard to requisitions, for purposes of the Provincial Planning Fund, the entire county is considered a rural municipality and the requisiton imposed is levied on that basis (0.259 mills on equalized assessment in 1983). In this instance, the process used is an advantage to Strathcona because if Sherwood Park (or the entire county) were treated as an urban centre the mill rate imposed (1983) would be 0.563.

In regard to service responsibilities, Sherwood Park is considered an urban municipality (of over 1500 residents) and is therefore responsible for paying for police services. (The county does, however, receive the law enforcement grant.) The rural area of the county, as in all rural areas of Alberta, is policed by RCMP paid for by the province. As has been noted earlier (see pages 375 and 383 for example), there is a distinct cost imbalance to rural residents of Strathcona since they are the only rural residents in Alberta which pay, through property taxation, for police services.

It is apparent that the province does not have a consistent policy on how to treat Sherwood Park for municipal purposes. Given the unique nature of the county, it would probably be to the county's overall advantage (and it would make sense) for Sherwood Park to be considered an urban area of equivalent to city status.[1]

A second disadvantage which is partly related to the unique local government arrangement in the county is the uncertainty in regard to future boundaries, assessment base and school service arrangements.

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[1] This would require the formation of a specific boundary for Sherwood Park.

Both the City of Edmonton and the Town of Fort Saskatchewan have, in the past few years, annexed large areas of the county. If the annexations removed both assessment and service responsibility in equal amounts they would raise no major financial problem, but the recent Edmonton annexation removed from the county a much larger percentage of assessment than the percentage of population or area removed. As well, the uncertainty of when annexations may occur or at what intervals they may occur raises difficulties in deciding on the logical location of facilities and long term financial planning.

In addition to the uncertainties of annexation by adjoining municipalities, there is the internal matter that at some future time Sherwood Park might wish to consider incorporation as a city. Related to that would be questions regarding boundaries and the assessment base.

In regard to school services, the recent consideration by the Town of Fort Saskatchewan to detach itself from the County School Division (although it is not being pursued) raises some uncertainty as to whether the issue will re-emerge in the future. In remaining in the County School Division, Fort Saskatchewan is denying itself the option of incorporating as a city (under present legislation). The detachment of the town from the School Division could possibly shift added costs to the remaining county system.

Although all municipalities are faced with some measure of uncertainty and experience some measure of change, it is the unusual degree of uncertainty in the County of Strathcona which raises problems for sound long term planning and administration.

It would therefore be useful for the county to examine in what ways the problem could be reduced to more manageable proportions: whether this involved changes in the County Act to permit cities to be part of County School Divisions; clarification by the province on the question of urban or rural status for purposes of grants; establishing ministerial boundaries for the Hamlet of Sherwood Park; or a more basic restructuring of all or parts of the county.

The Future

Although the present arrangements have worked well, there are a number of conditions which must be met if the Strathcona system of local government is not to encounter major difficulties.

As indicated in a previous study[1] the first condition is that representation on council must bear a reasonable relationship to the number of urban and rural residents, and municipal decisions must be perceived as being fair and equitable in relation to each. Because the representation of Sherwood Park on the council has increased as the urban population has increased, urban representation on council has not been a major issue to date (although urban representation has been less than the urban share of the total population would indicate). In the years ahead if the urban population increases substantially, the issue of urban representation will emerge unless periodic adjustments to electoral divisions are made.

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[1] Alberta Municipal Affairs. Hamlet of Sherwood Park. A review of Alternative Forms of Government, 1977.

A second condition relates to the cost and benefits of the services provided to the urban and rural areas. There is the possibility of a sense of grievance on the part of either the urban or rural residents that one group is subsidizing the other for services which they do not need or to which they have no ready access.

In the past taxes for both the urban and rural areas of the county were average or less than average compared to other urban and rural areas. And because a large part of total service costs were borne by non-residential taxation, the precise cost/benefit to urban and rural areas was not an issue of crucial concern.

However, present taxes for the urban and rural areas, in relation to other comparable municipalities, although not the highest, are above average and in the higher ranges.

If the county experienced further loss of industrial assessment or if residential and acreage population increased substantially with no parallel increase in industrial assessment, then the issue of urban/rural cost/benefits might assume added importance and result in wider public debate.

It is relevant in discussing the taxes paid by an individual or an area, in relation to services received, to consider the nature of the municipal tax system as it applies to all Alberta municipalities. The services which a municipality provides to its residents is paid for (after grants and other revenue is deducted) by each taxpayer paying taxes in relation to the value of the real property he owns. There is therefore a considerable distributive element in the tax system and it does not result in each person paying the exact cost for the specific services used by particular individuals.

There is an added element in the County of Strathcona because it contains both a major urban and rural area. The services needed, provided or accessible are different in each, and the pattern of expenditure is different: piped sewer and water systems are provided in the urban area and only very exceptionally in the rural; garbage collection is provided in the urban area but in only certain parts of the rural area; Agriculture Service Board expenditures are required primarily in the rural area; policing in other rural municipalities is paid for by the province but in Strathcona the policing for Sherwood Park is paid for by the urban and rural taxpayer. There are other services such as fire protection, ambulance and libraries which are provided both to urban and rural areas.

In terms of certain capital expenditures it should be noted that in the urban area developers construct the urban local road system and the local sewer and water system and these are paid for by the person purchasing the lot - they are not paid for by the taxpayers. The rural road system, on the other hand, is paid for by rural and urban taxpayers and because of the type of road the maintenance costs are high relative to total municipal expenditure.

In this report, reference has been made to the use of user charges or fees for certain services to ensure the costs are borne directly by those that benefit from the service. Of course, this is presently the county policy in respect to water and sewage services and, to a large extent, for recreation services. Bylaw enforcement, agricultural services and garbage collection are other services for which user charges have been suggested (although problems in administration and fiscal philosophies have also been recognized).

However, while user charges may be effective in eliminating benefit/cost inequities for a few services, it should be recognized that the bulk of expenditures, especially for general government, transportation and police and fire protection, must be financed through general taxation. The challenge for the county is to ensure that, while inequities may persist in the financing of specific services such as police protection, the overall municipal operation is such that no residents or particular group of residents are being unfairly treated.

The obvious economies of scale and system efficiencies inherent in the integrated structure of the county have been mentioned in this report. Separate municipal jurisdictions for the urban and rural components may be considered desirable on political grounds or on strict benefit/cost principles; however, the analysis contained in this report leads to the conclusion that such a structure would inevitably result in significantly higher overall costs and would likely lead to comparatively lower service levels. The generally above average performance of the county in terms of cost-efficiency and cost-effectiveness would be difficult to maintain.

In the present uncertain economic environment it appears sensible, on economic grounds at least, to capitalise on the advantages of the existing integrated structure which underlie much of the county's success to date. Some of the political disadvantages which accompany such a unique structure in the Alberta context could be overcome through provincial-municipal negotiations. And the rural/urban benefit/cost issue could be handled by a continuing review of the service provisions and financing, including perhaps periodic public opinion polls (such as that done in 1979) to assess particular problems or grievances of county residents.

There is little doubt that residents of the county have a strong community identity and, unless there has been a drastic reversal of opinion in the past few years, it appears that county residents have a strong desire to see the continued existence of their municipality.

If the county can resolve some of the political problems of its structure, if it can continue to successfully exploit the economic advantages of its structure, and if it can avoid further losses to annexation, there appears no sound reason why it should not continue to operate under its present local government system regardless of how unusual it may appear in the Alberta context.

If those conditions cannot be met then the county may have to consider a basic restructuring. Such a consideration does not appear warranted at this time but if it later should appear to be, it could be the topic of another major study.

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MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

APPENDICES

Alberta Municipal Affairs
Urban Advisory Group and
Special Projects Branch

July 1983

NOTE:

This is one of three volumes which comprise the entire Report on Municipal Services in the County of Strathcona No. 20.

Companion volumes to this one include:

- The Summary Report
- The Main Report

A limited number of copies of the entire report are available from:

Alberta Municipal Affairs
Urban Advisory Group and
Special Projects Branch
9th Floor
Jarvis Building
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Edmonton, Alberta
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MUNICIPAL SERVICES IN THE COUNTY OF STRATHCONA NO. 20

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APPENDIX I

OUTLINE: For Study of Municipal Services in the County of Strathcona

OUTLINE **APPENDIX I** Oct. 4/1982

For Study of Municipal Services in the County of Strathcona

I. CONTENT OF STUDY

The proposed study will examine the following matters:

- The range and level of municipal services provided by the County of Strathcona.
- The financing of municipal services, including local taxation, grants, user fees, frontage charges, etc.; including local education cost components.
- Indicators regarding the efficiency and effectiveness of municipal service provision in the County.
- Municipal service provision and costs in regard to the various components of the County; that is, Sherwood Park, small holdings, rural areas.
- Apparent reasons for public satisfaction/dissatisfaction with municipal services and costs in the County.
- What changes, modifications in service priorities and financing might improve municipal services and the level of public satisfaction.
- Evaluation of the effectiveness of the present County structure in providing and financing municipal services in a satisfactory manner to the entire County and its various rural/urban components.

II. METHODOLOGY OF STUDY

The proposed study will contain the following information from which conclusions would be derived:

- The most current and complete financial data available regarding services in the County, probably 1981 supplemented with 1982 budget data.

- A five-year review (1976-1981) in service costs and financing trends in the County; including taxation levels, grants, proportion of expenditures on specific services, etc.
- Impact on municipal services/costs of recent changes in the County; such as general assessment, boundary changes, urban growth.
- Information on public attitudes regarding service levels, taxation rates, expectations of local government services and of residency in the County based largely on existing public opinion surveys.
- Financial data and other information from comparable municipalities to evaluate the County services, financing methods and financing capability in relation to other municipal jurisdictions in Alberta.

III. DATA SOURCES AND STRUCTURE

Due to major studies undertaken in recent years (Municipal Affairs study of 1976, Annexation studies 1979/80), there is a large amount of detailed information available for the County. Apart from endeavouring to update the data to as current a time as possible, the study will, insofar as is possible, present the data in the following form:

- So that information on service levels, cost and degree of public satisfaction is available in terms of the various rural/urban components of the County.
- So that reasonable indicators of service levels are derived. The main indicators would be in terms of dollar expenditures, but supplementary indicators would be used which are appropriate for specific services (such as road conditions, recreation programs and participation rates, emergency response times, etc.).

- So that comparisons can be made with other municipal jurisdictions, in terms of service levels and costs, assessment base, taxation levels, service priorities.
    - Because of the unique structure of the County, comparisons with other municipalities would involve comparing Sherwood Park with similar urban centres, and comparing the small holdings and rural components of the County with other rural jurisdictions.
    - It is anticipated that the comparisons would be limited to the degree to which detailed information is available for the municipalities used as a comparative basis.
- So that conclusions can be reasonably made regarding service efficiency (that is, value for money spent) and service effectiveness (that is, meeting the needs and wants of residents).
- So that conclusions can be drawn regarding any differences in service costs and levels, efficiency and effectiveness among the various components of the County.

IV. INITIAL EXPECTATIONS

It is recognized that the County of Strathcona is unique among rural municipal jurisdictions in Alberta due to the size of the hamlet of Sherwood Park. Consequently, comparisons with other municipalities will involve selecting municipalities which are similar to components of the County: that is, Sherwood Park compared with other urban centres, the rural component compared with jurisdictions with similar acreage/ small holdings development.

The precise degree to which information for the County can be disaggregated into the components of the County is not known at this time. It is expected, however, that the County administration will endeavour to provide data and information in a manner appropriate to the objectives of this study. Comments and information from county officials and councillors will be of value in properly assessing specific municipal services and in providing local knowledge and insight which cannot be obtained solely from financial records.

Without prejudging the study findings, it is expected that public dissatisfaction, if any, with municipal services may be due to a number of causes: for example,

- that the services are inadequate.
- that the services are adequate for one or more components of the County, but not for all.
- that the services are adequate, but one or more components of the County is bearing an unfair share of the service costs.
- that the services are adequate, but too costly.
- that service costs are acceptable, but that the service priorities are wrong or that one or more specific services are below expected standards.

The study will attempt to determine what the cause or causes of any public dissatisfaction are, and, in comparison with other municipalities, whether or not the dissatisfaction appears warranted (i.e., are taxes too high? service levels too low?). Also, the study will attempt to determine whether municipal service problems can be corrected through adjustments in service priorities and financing methods, or whether a study of restructuring of the local government for the County would be warranted.

APPENDIX II

MUNICIPAL DATA TABLES

APPENDIX II

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Note: All tables include data for:

- Comparison municipalities, 1976 and 1981 (1982 for Tables II-1, II-2, II-2A)
- Strathcona County, 1976, 1981 and 1982

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APPENDIX TABLE II-1

POPULATION

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	1,397	8,265	9,981
Fort McMurray	15,312	30,772	33,576
Fort Saskatchewan	8,744	12,157	12,455
Grande Prairie	17,475	24,168	24,263
Leduc	8,498	12,191	12,471
Red Deer	31,723	45,405	48,562
St. Albert	23,905	31,180	32,982
Spruce Grove	6,827	9,749	10,784
County Leduc #25	10,815	10,949	13,258
County Parkland #31	17,415	25,415	23,626
M.D. Foothills #31	8,317	9,069	8,725
M.D. Rockyview #44	15,160	16,863	17,362
M.D. Sturgeon #90	12,179	16,337	13,682
STRATHCONA COUNTY			
Sherwood Park	26,295	28,798	29,764
Rural Components			
- Hamlets+	2,545	2,982	1,384
- Country Residential	8,950	13,150	13,820
- Farm	4,004	5,149	2,981
- Total Rural	15,499	21,281	18,185
Total County	41,794	50,079	47,949

+ includes hamlets other than Sherwood Park, resort districts and mobile home parks.

Source: Alberta Mun. Affairs. Official Population Lists (Amended where necessary).

Strathcona County. 1981 census, and Nov. 1982 population estimates by County. Rural breakdown for 1976 estimated from various sources.

APPENDIX TABLE II-2

EQUALIZED ASSESSMENT - in dollars

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	4,595,240	35,284,900	52,173,890
Fort McMurray	37,365,610	164,554,180	192,312,760
Fort Saskatchewan	25,284,100	166,004,030	206,691,700
Grande Prairie	40,906,350	159,826,730	193,729,940
Leduc	17,009,130	69,406,760	83,362,540
Red Deer	68,126,580	259,338,380	313,377,940
St. Albert	48,203,220	174,126,830	198,944,700
Spruce Grove	14,127,870	51,991,970	62,055,170
County Leduc #25	42,696,970	119,992,230	155,259,610
County Parkland #31	82,741,240	303,182,490	341,956,140
M.D. Foothills #31	35,452,840	91,771,730	115,439,240
M.D. Rockyview #44	74,552,450	233,045,980	321,726,170
M.D. Sturgeon #90	30,217,250	147,330,580	145,906,480
STRATHCONA COUNTY			
Sherwood Park	n.c.	n.c.	165,309,260
Rural Components	n.c.	n.c.	324,943,000
Total County	152,158,670	499,062,580	490,252,260

n.c. not calculated.

Source: Assessment Equalization Board Data.

1982 breakdown for Sherwood Park calculated from actual assessment values converted to equalized values. It is an estimation only.

APPENDIX TABLE II-2A

EQUALIZED ASSESSMENT - in dollars per capita (to nearest $10)

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	3,290	4,270	5,230
Fort McMurray	2,440	5,350	5,730
Fort Saskatchewan	2,890	13,650	16,600
Grande Prairie	2,340	6,620	7,990
Leduc	2,000	5,690	6,690
Red Deer	2,150	5,710	6,450
St. Albert	2,020	5,580	6,030
Spruce Grove	2,070	5,330	5,750
County Leduc #25	3,950	10,950	11,710
County Parkland #31	4,750	11,930	14,470
M.D. Foothills #31	4,260	10,120	13,230
M.D. Rockyview #44	4,920	13,820	18,530
M.D. Sturgeon #90	2,380	9,010	10,660
STRATHCONA COUNTY			
Sherwood Park	n.c.	n.c.	5,550
Rural Components	n.c.	n.c.	17,870
Total County	3,640	9,970	10,220

n.c. not calculated.

Source: see Appendix Tables II-1 and II-2.

APPENDIX TABLE II-3

NON-RESIDENTIAL/NON-FARM TAXABLE ASSESSMENT - as a per cent of total taxable assessment

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	30	18	
Fort McMurray	33	27	
Fort Saskatchewan	45	74	
Grande Prairie	34	39	
Leduc	17	25	
Red Deer	34	31	
St. Albert	6	14	
Spruce Grove	24	28	
County Leduc #25	73	62	
County Parkland #31	66	61	
M.D. Foothills #31	34	24	
M.D. Rockyview #44	47	28	
M.D. Sturgeon #90	38	39	
STRATHCONA COUNTY			
Sherwood Park	n.c.	11	12
Rural Components	n.c.	67	63
Total County	55	46	43

n.c. not calculated.

Note: Non-residential/non-farm assessment includes commercial and industrial land and buildings, machinery and equipment, pipe and power, Cable TV, railway.

Source: Assessment Equalization Board. Actual Taxable Assessment Breakdown.

Strathcona County Data.

APPENDIX TABLE II-4

DENSITY - number of persons per hectare

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	1.3	6.1	
Fort McMurray	4.0	6.2*	
Fort Saskatchewan	7.0	3.8	
Grande Prairie	4.4	5.9	
Leduc	6.4	3.9*	
Red Deer	6.6	8.8	
St. Albert	11.6	8.4	
Spruce Grove	10.0	4.9	
County Leduc #25	0.03	0.03	
County Parkland #31	0.05	0.07	
M.D. Foothills #31	0.02	0.025	
M.D. Rockyview #44	0.03	0.04	
M.D. Sturgeon #90	0.06	0.08	
STRATHCONA COUNTY			
Sherwood Park+	14.5	15.9	16.4
Rural Components	0.11	0.15	0.15
Total County	0.29	0.34	0.39

* 1980 data.
+ based upon an area of 1,813 hectares.

Note: One hectare is approximately equal to 2.5 acres.

Area data excludes water area.

Source: Alberta Municipal Affairs. 1976 Municipal Statistics; 1981 Financial Statements of Individual Municipalities (1982 for Strathcona).

Strathcona County Population Data (see Appendix Table II-1).

APPENDIX TABLE II-5

DENSITY - number of persons per kilometer of roads
(excluding lanes and alleys)

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	40	125	
Fort McMurray	193	248	
Fort Saskatchewan	135	141	
Grande Prairie	124	142	
Leduc	152	166	
Red Deer	120	94	
St. Albert	213	172	
Spruce Grove	192	115	
County Leduc #25	3.0	3.9	
County Parkland #31	6.6	9.7	
M.D. Foothills #31	2.4	4.4	
M.D. Rockyview #44	3.6	6.5	
M.D. Sturgeon #90	5.8	8.5	
STRATHCONA COUNTY			
Sherwood Park	n.c.	229	236
Rural Components	n.c.	11.7	10.1
Total County	23.2	25.8	25.0

n.c. not calculated.

Note: 1976 data may include 'unopened roads' for some municipalities. 1981 data does not.

Source: Alberta Municipal Affairs. 1976 Municipal Statistics; 1981 Financial Statements of individual municipalities (1982 for Strathcona).

APPENDIX TABLE II-6

TOTAL GENERAL OPERATING MUNICIPAL EXPENDITURES - in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	280	85	465	109		
Fort McMurray	400	164	617	115		
Fort Saskatchewan	186	64	660	48		
Grande Prairie	309	132	629	95		
Leduc	241	120	545	96		
Red Deer	331	154	710	124		
St. Albert	251	125	560	100		
Spruce Grove	267	129	720	135		
County Leduc #25	295	75	816	74		
County Parkland #31	354	75	621	52		
M.D. Foothills #31	325	76	512	51		
M.D. Rockyview #44	330	67	730	53		
M.D. Sturgeon #90	273	110	483	54		
STRATHCONA COUNTY						
Total County	234	64	791	79	700	68

Note: General operating municipal expenditures excludes all requisitions and it excludes utility operations (water, transit and others).
It also excludes land development and subdivision expenses.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6A

GENERAL GOVERNMENT - Administrative and Legislative expenses, in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	93	28	79	18		
Fort McMurray	82	34	69	13		
Fort Saskatchewan	50	17	49	3.6		
Grande Prairie	23	10	55	8.3		
Leduc	37	18	73	13		
Red Deer	44	21	77	14		
St. Albert	27	14	100	18		
Spruce Grove	35	17	88	16		
County Leduc #25	30	8	75	6.8		
County Parkland #31	32	7	54	4.5		
M.D. Foothills #31	30	7	41	4.1		
M.D. Rockyview #44	33	7	79	5.8		
M.D. Sturgeon #90	27	11	53	5.8		
STRATHCONA COUNTY						
Total County	26	7	86	8	110	11

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6B

PROTECTIVE SERVICES - Operating expenditures, in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	7	2	75	18		
Fort McMurray	67	27	147	27		
Fort Saskatchewan	27	9	53	3.9		
Grande Prairie	51	22	105	16		
Leduc	24	12	44	7.7		
Red Deer	67	31	119	21		
St. Albert	35	18	87	16		
Spruce Grove	27	13	45	8.3		
County Leduc #25	2	0.6	7.9	0.7		
County Parkland #31	14	3	34	2.8		
M.D. Foothills #31	4	1	8.5	0.8		
M.D. Rockyview #44	6	1	14	1.0		
M.D. Sturgeon #90	4	1	18	2.0		
STRATHCONA COUNTY						
Total County	23	6	57	6	73	7

Note: Protective services includes police, fire, ambulance, emergency measures and protective inspections.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6C

TRANSPORTATION SERVICES - Operating expenditures, in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	76	23	61	14		
Fort McMurray	53	22	110	21		
Fort Saskatchewan	32	11	57	4.2		
Grande Prairie	46	20	79	12		
Leduc	30	15	67	12		
Red Deer	69	32	132	23		
St. Albert	49	25	94	17		
Spruce Grove	39	19	63	12		
County Leduc #25	167	42	492	45		
County Parkland #31	189	40	319	27		
M.D. Foothills #31	168	39	310	31		
M.D. Rockyview #44	208	42	449	32		
M.D. Sturgeon #90	161	65	263	29		
STRATHCONA COUNTY						
Total County	92	25	279	28	196	19

Note: Transportation services includes common services/equipment pool; roads, streets, walks, lighting expenses; storm sewers and drainage. It excludes public transit and airport services as utility operations.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6D

WASTE AND SEWAGE SERVICES - Operating expenditures, in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	13	4	51	12		
Fort McMurray	28	12	40	7.5		
Fort Saskatchewan	12	4	21	1.5		
Grande Prairie	14	6	24	3.7		
Leduc	19	10	25	4.4		
Red Deer	24	11	47	8		
St. Albert	16	8	21	3.7		
Spruce Grove	14	7	23	4.3		
County Leduc #25	6	1.5	11	1.0		
County Parkland #31	2	0.5	1.3	0.1		
M.D. Foothills #31	0.2	0.05	2.1	0.2		
M.D. Rockyview #44	0.7	0.1	1.9	0.1		
M.D. Sturgeon #90	nil	nil	4.7	0.5		
STRATHCONA COUNTY						
Total County	10	3	27	3	31	3

Note: Waste and sewage services includes sewage collection and treatment expenses and garbage collection and disposal expenses.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6E

HEALTH AND WELFARE - Operating expenditures in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	nil	nil	22	5.2		
Fort McMurray	13	5	25	4.7		
Fort Saskatchewan	3.5	1.2	8.8	0.7		
Grande Prairie	22	9	17	2.6		
Leduc	8	4	19	3.3		
Red Deer	10	5	12	2.2		
St. Albert	8	4	8.6	1.5		
Spruce Grove	nil	nil	0.01	-		
County Leduc #25	5.6	1.4	12	1.1		
County Parkland #31	0.1	0.03	0.4	0.04		
M.D. Foothills #31	nil	nil	nil	nil		
M.D. Rockyview #44	8	1.6	nil	nil		
M.D. Sturgeon #90	nil	nil	nil	nil		
STRATHCONA COUNTY						
Total County	2	0.6	14	1.4	15	1.5

Note: Health and welfare includes expenses for preventive social services, day care, other public health and cemeteries.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6F

DEVELOPMENT SERVICES - Operating Expenditures in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	nil	nil	19	4.5		
Fort McMurray	8.3	3.4	17	3.3		
Fort Saskatchewan	nil	nil	5.4	0.4		
Grande Prairie	0.1	0.05	nil	nil		
Leduc	nil	nil	3.8	0.7		
Red Deer	1.9	0.9	4.1	0.7		
St. Albert	5.8	2.9	9.1	1.6		
Spruce Grove	nil	nil	7.1	1.3		
County Leduc #25	13	3.2	20	1.8		
County Parkland #31	13	2.8	21	1.8		
M.D. Foothills #31	12	2.8	23	2.3		
M.D. Rockyview #44	10	2.1	29	2.1		
M.D. Sturgeon #90	45	18	56	6.2		
STRATHCONA COUNTY						
Total County	5.9	1.6	10	1.0	4.7	0.5

Note: Development services includes municipal planning, zoning and development; community and agriculture services, public housing, land and building rentals. It does not include Subdivision developments.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6G

RECREATION AND CULTURE - Operating expenditures in dollars
per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	16	5	97	23		
Fort McMurray	58	24	62	12		
Fort Saskatchewan	33	11	74	5.4		
Grande Prairie	43	19	77	12		
Leduc	26	13	78	14		
Red Deer	43	20	77	14		
St. Albert	31	15	88	16		
Spruce Grove	42	20	88	17		
County Leduc #25	8	2	34	3.1		
County Parkland #31	21	4	20	1.7		
M.D. Foothills #31	6	0.6	10	1.0		
M.D. Rockyview #44	3	0.6	11	0.8		
M.D. Sturgeon #90	9	3.5	13	1.5		
STRATHCONA COUNTY						
Total County	35	10	104	10.5	107	10.5

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6H

DEBT CHARGES - expenditures, in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	57	17	39	9.2		
Fort McMurray	34	14	55	10		
Fort Saskatchewan	19	6.6	95	7		
Grande Prairie	51	22	49	7.4		
Leduc	55	27	115	20		
Red Deer	53	25	73	13		
St. Albert	37	18	66	12		
Spruce Grove	49	24	102	19		
County Leduc #25	14	3.5	10	0.9		
County Parkland #31	45	9.5	51	4.3		
M.D. Foothills #31	49	4.9	2.7	0.3		
M.D. Rockyview #44	6	1.2	48	3.5		
M.D. Sturgeon #90	3	1.1	3.7	0.4		
STRATHCONA COUNTY						
Total County	20	5.4	21	2.2	42	4.1

Note: Does not include debt charges related to water system, public transit system or other utility operations. Includes bank charges and short-term debt charges, as well as debentures and other long-term debt.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-6I

TRANSFERS TO OWN RESERVES AND FUNDS - expenses, in dollars per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	20	6	22	5.2		
Fort McMurray	55	23	92	17		
Fort Saskatchewan	9	2.9	296	22		
Grande Prairie	59	25	223	34		
Leduc	8	4.1	121	21		
Red Deer	18	8.3	145	25		
St. Albert	41	20	89	16		
Spruce Grove	16	7.8	304	57		
County Leduc #25	49	12	153	14		
County Parkland #31	38	7.9	121	10		
M.D. Foothills #31	56	13	114	11		
M.D. Rockyview #44	56	11	98	7.1		
M.D. Sturgeon #90	25	10	73	8.0		
STRATHCONA COUNTY						
Total County	21	5.7	192	19	121	12

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7

GENERAL OPERATING REVENUE - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	280	496	
Fort McMurray	395	591	
Fort Saskatchewan	192	800	
Grande Prairie	316	672	
Leduc	248	524	
Red Deer	342	777	
St. Albert	251	715	
Spruce Grove	279	717	
County Leduc #25	326	804	
County Parkland #31	346	671	
M.D. Foothills #31	291	511	
M.D. Rockyview #44	327	760	
M.D. Sturgeon #90	283	478	
STRATHCONA COUNTY			
Total County	280	817	762

Note: General operating revenues exclude taxes collected to pay all requisitions and it excludes revenue from utility operations (water, transit and others). It also excludes revenues from land development and subdivision.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7A

MUNICIPAL PROPERTY TAXES - in dollars
per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	130	40	156	37		
Fort McMurray	174	71	323	60		
Fort Saskatchewan	115	40	397	29		
Grande Prairie	153	65	258	39		
Leduc	108	54	153	27		
Red Deer	113	53	181	32		
St. Albert	139	69	428	77		
Spruce Grove	136	66	202	38		
County Leduc #25	202	51	440	40		
County Parkland #31	255	54	358	30		
M.D. Foothills #31	191	58	233	23		
M.D. Rockyview #44	229	47	432	31		
M.D. Sturgeon #90	128	52	269	30		
STRATHCONA COUNTY						
Total County	191	52	386	39	373	37

Note: Municipal property taxes includes grants-in-lieu of taxes. It does not include taxes or grants-in-lieu collected for requisitions.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7B

SPECIAL ASSESSMENT, LOCAL IMPROVEMENT AND BUSINESS TAXES - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	25	2	
Fort McMurray	13	9.5	
Fort Saskatchewan	1.7	17	
Grande Prairie	32	50	
Leduc	17	72	
Red Deer	26	26	
St. Albert	4.3	12	
Spruce Grove	24	54	
County Leduc #25	nil	1.2	
County Parkland #31	0.8	0.3	
M.D. Foothills #31	nil	45	
M.D. Rockyview #44	nil	14	
M.D. Sturgeon #90	nil	nil	
STRATHCONA COUNTY			
Total County	0.2	0.3	0.2

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7C

SALE OF GOODS AND SERVICES REVENUE - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	16	62	
Fort McMurray	29	45	
Fort Saskatchewan	10	11	
Grande Prairie	28	53	
Leduc	21	25	
Red Deer	51	99	
St. Albert	29	81	
Spruce Grove	29	57	
County Leduc #25	14	28	
County Parkland #31	11	15	
M.D. Foothills #31	3	5.3	
M.D. Rockyview #44	10	24	
M.D. Sturgeon #90	39	51	
STRATHCONA COUNTY			
Total County	23	115	94

Note: Does not include revenues from utility operations (water, transit and others).

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7D

OTHER REVENUE FROM OWN SOURCES - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	44	66	
Fort McMurray	73	92	
Fort Saskatchewan	16	207	
Grande Prairie	42	176	
Leduc	38	106	
Red Deer	56	191	
St. Albert	22	93	
Spruce Grove	44	83	
County Leduc #25	22	147	
County Parkland #31	43	172	
M.D. Foothills #31	18	102	
M.D. Rockyview #44	19	143	
M.D. Sturgeon #90	22	78	
STRATHCONA COUNTY			
Total County	34	128	89

Note: Also includes licences, permits, bylaw fines, returns on investments, franchise and concessions revenue, rental revenues, services to other governments revenue, tax penalties and costs.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7E

UNCONDITIONAL GRANTS - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	40	171	
Fort McMurray	30	98	
Fort Saskatchewan	30	24	
Grande Prairie	27	34	
Leduc	38	38	
Red Deer	22	27	
St. Albert	17	26	
Spruce Grove	17	103	
County Leduc #25	29	43	
County Parkland #31	23	22	
M.D. Foothills #31	46	54	
M.D. Rockyview #44	41	45	
M.D. Sturgeon #90	26	30	
STRATHCONA COUNTY			
Total County	16	27	127

Source: same as Appendix Table II-5.

APPENDIX TABLE II-7F

CONDITIONAL GRANTS - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	24	40	
Fort McMurray	76	18	
Fort Saskatchewan	5	51	
Grande Prairie	33	80	
Leduc	7	48	
Red Deer	16	77	
St. Albert	19	36	
Spruce Grove	16	182	
County Leduc #25	39	135	
County Parkland #31	12	102	
M.D. Foothills #31	33	72	
M.D. Rockyview #44	28	93	
M.D. Sturgeon #90	55	45	
STRATHCONA COUNTY			
Total County	16	42	70

APPENDIX TABLE II-7G

CONTRIBUTIONS FROM OWN RESERVES AND FUNDS - in dollars per capita

	1976	1981	1982
COMPARISON MUNICIPALITIES			
Airdrie	nil	nil	
Fort McMurray	nil	6.5	
Fort Saskatchewan	14	94	
Grande Prairie	nil	21	
Leduc	18	82	
Red Deer	57	177	
St. Albert	21	39	
Spruce Grove	14	36	
County Leduc #25	20	10	
County Parkland #31	1	1.4	
M.D. Foothills #31	nil	nil	
M.D. Rockyview #44	nil	9	
M.D. Sturgeon #90	13	4.9	
STRATHCONA COUNTY			
Total County	nil	118	8.4

Source: same as Appendix Table II-5.

APPENDIX TABLE II-8

SUPPLEMENTARY SCHOOL REQUISITIONS - in dollars
per capita and dollars per $1000 equalized assessment

	1976		1981		1982	
	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.	$'s p.c.	$'s per $1000 e.a.
COMPARISON MUNICIPALITIES						
Airdrie	62	19	82	19		
Fort McMurray	60	25	178	33		
Fort Saskatchewan	53	18	257	20		
Grande Prairie	68	29	164	25		
Leduc	31	15	135	24		
Red Deer	55	25	145	25		
St. Albert	52	26	135	24		
Spruce Grove	35	17	104	20		
County Leduc #25	60	15	252	23		
County Parkland #31	79	17	230	19		
M.D. Foothills #31	94	22	198	20		
M.D. Rockyview #44	94	19	266	19		
M.D. Sturgeon #90	63	25	203	23		
STRATHCONA COUNTY						
Total County	65	18	207	20	246	24

Source: same as Appendix Table II-5.

APPENDIX TABLE II-9

WATER UTILITY DATA - operating expenses in dollars
per capita and utility revenues as a per cent of expenses

	1976		1981		1982	
	$'s p.c.	Rev. as % of Ex.	$'s p.c.	Rev. as % of Ex.	$'s p.c.	Rev. as % of Ex.
COMPARISON MUNICIPALITIES						
Airdrie	41	117 %	75	111 %		
Fort McMurray	89	59 %	64	137 %		
Fort Saskatchewan	59	105 %	186	98 %		
Grande Prairie	49	104 %	99	81 %		
Leduc	45	87 %	85	100 %		
Red Deer	36	95 %	40	147 %		
St. Albert	39	102 %	58	95 %		
Spruce Grove	40	109 %	67	112 %		
County Leduc #25	7	99 %	65	100 %		
County Parkland #31	3	92 %	8.7	100 %		
M.D. Foothills #31	n.a.		n.a.			
M.D. Rockyview #44	n.a.		n.a.			
M.D. Sturgeon #90	3	107 %	36	100 %		
STRATHCONA COUNTY						
Total County	39	95 %	97	89 %	56	110 %

n.a. not applicable.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-10

PUBLIC TRANSIT - operating expenses in dollars per capita,
and revenues as a per cent of expenses

	1976		1981		1982	
	$'s p.c.	Rev. as % of Ex.	$'s p.c.	Rev. as % of Ex.	$'s p.c.	Rev. as % of Ex.
COMPARISON MUNICIPALITIES						
Airdrie	n.a.		21	73 %		
Fort McMurray	n.a.		13	112 %		
Fort Saskatchewan	n.a.		n.a.			
Grande Prairie	n.a.		62	106 %		
Leduc	n.a.		n.a.			
Red Deer	17	75 %	42	67 %		
St. Albert	22	46 %	54	54 %		
Spruce Grove	n.a.		n.a.			
County Leduc #25	n.a.		n.a.			
County Parkland #31	n.a.		n.a.			
M.D. Foothills #31	n.a.		n.a.			
M.D. Rockyview #44	n.a.		n.a.			
M.D. Sturgeon #90	n.a.		n.a.			
STRATHCONA COUNTY						
Total County	5	100 %	29	55 %	29	62 %

n.a. not applicable.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-11

LAND DEVELOPMENT AND SUBDIVISION - expenditures in dollars per capita and revenue as a per cent of expenditure (1981 only)

	1981		
	$'s p.c.	Rev. as % of Ex.	1982
COMPARISON MUNICIPALITIES			
Airdrie	271	114 %	
Fort McMurray	329	100 %	
Fort Saskatchewan	+	+	
Grande Prairie	46	73 %	
Leduc	*	*	
Red Deer	710	100 %	
St. Albert	19	258 %	
Spruce Grove	n.a.		
County Leduc #25	n.a.		
County Parkland #31	n.a.		
M.D. Foothills #31	n.a.		
M.D. Rockyview #44	n.a.		
M.D. Sturgeon #90	n.a.		
STRATHCONA COUNTY			
Total County	n.a.		n.a.

+ no expenditures reported, but $6,140 in revenues.
* no expenditures reported, but $78,242 in revenues.

Source: same as Appendix Table II-5.

APPENDIX TABLE II-12

GENERAL DEBT AND UTILITY DEBT - in dollars per capita

	1976		1981		1982	
	General	Utilities	General	Utilities	General	Utilities
COMPARISON MUNICIPALITIES						
Airdrie	379	85	623	113		
Fort McMurray	710	238	256	60		
Fort Saskatchewan	229	81	778	167		
Grande Prairie	328	134	1179	132		
Leduc	431	74	1000	237		
Red Deer	540	75	572	234		
St. Albert	341	80	734	197		
Spruce Grove	428	144	773	282		
County Leduc #25	4	12	100	109		
County Parkland #31	37	23	341	128		
M.D. Foothills #31	nil	nil	nil	nil		
M.D. Rockyview #44	nil	nil	nil	nil		
M.D. Sturgeon #90	nil	24	43	78		
STRATHCONA COUNTY						
Total County	287	36	136	233	164	239

Note: debt figures include long-term and debenture debt principal outstanding. Utilities debt includes that for water, transit and other utilities.
Debt for land development and subdivisions is not included in either figure.

Source: same as Appendix Table II-5.

APPENDIX III

PUBLIC OPINION DATA: The Burton Studies

APPENDIX III

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APPENDIX III

PUBLIC OPINION DATA: The Burton Studies

The main source of data on Strathcona County residents' views on local services in the county is a survey undertaken in 1979 by Dr. T.L. Burton of the University of Alberta. The survey results are reported in three forms:

1. A Strathcona County Residents Survey 1979 (July 1979, 73 pp. ex. appendices)

This study assesses four general matters:

- community identity and attachment to the county,
- levels of satisfaction with local services,
- degree of involvement in local issues,
- attitudes towards proposed annexation by Edmonton and alternative forms of local government in the Edmonton metropolitan area.

The report was one of the county's submissions to the annexation hearings. It is of a general nature with little attention given to differences of opinion on local services among the different types of county resident or among residents in different parts of the county.

2. Local Public Services in the County of Strathcona (Dec. 1979, 234 pp.)

This report was prepared for the county's internal use. The original survey data was re-analysed to consolidate the information on each local service.

The analysis examines:

- levels of use of each service,
- levels of satisfaction with each service,
- contacts with county councillors,
- general comments on the quality of the service.

Each service is the subject of a separate chapter. The services surveyed are:

- hospitals
- public health
- education and school
- police protection
- fire protection
- water supply
- sewage and drainage systems
- garbage collection and disposal
- roads
- local social services
- parks and recreation
- libraries
- day care
- public transport (local and to Edmonton)

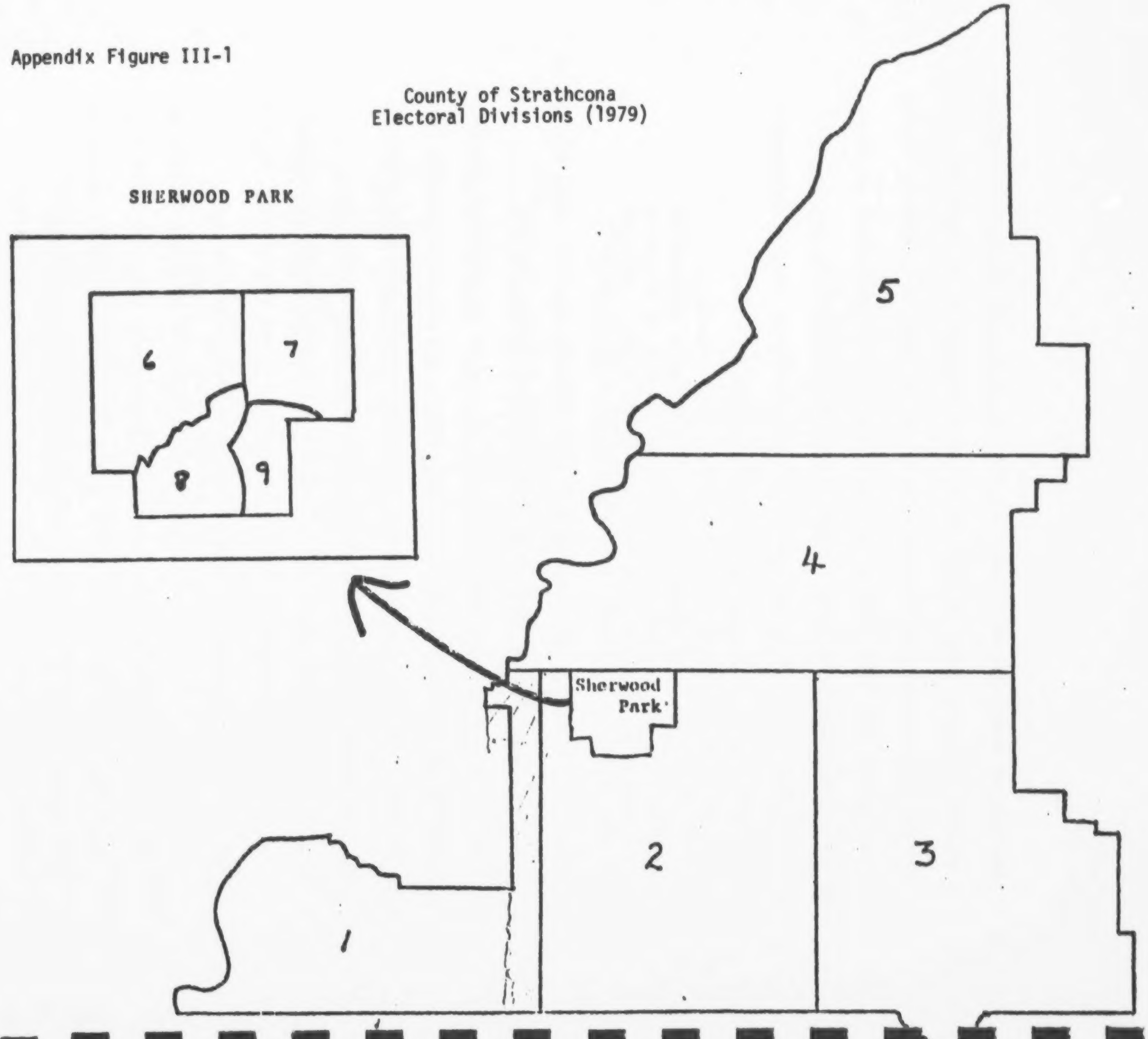
3. A Regional Analysis of the Strathcona County Residents Survey (Feb. 1980, 391 pp.)

This report was also prepared for the county's internal use. The survey data was re-organized and examined according to the (then) nine electoral divisions of the county (see Appendix Figure III-1).

The analysis is comprehensive in that it examines all matters covered in the original survey and is not restricted to local service matters. It is also comparative in nature with each electoral division being compared with the entire county.

Appendix Figure III-1

County of Strathcona
Electoral Divisions (1979)


SHERWOOD PARK
6
7
8
9
5
4
Sherwood Park
2
3
1

THE SURVEY

The survey was conducted by interviews with the household head or spouse in one-in-ten of all county households. The interviews were of a structured (or standardized) type and were undertaken in April 1979 in conjunction with the municipal census.

All persons surveyed were residents of Strathcona County. The initial sample size was 1,304 persons but due to non-contacts and refusals the actual number surveyed was 1,189 (a 91.2% response rate).

Overall service satisfaction was measured by responses to questions regarding the management of county affairs in general and the representativeness of the county council in relation to the different types of resident.

The key survey question generating data on levels of satisfaction with specific services was worded as follows:

> "I am now going to mention some particular local government services. Would you please tell me whether you think the provision of these is bad, average or good in the County, as compared with other places in Alberta generally?"

GENERAL RESULTS

The first annexation-related study indicates that overall levels of satisfaction with local services in the county are generally high. In regard to specific services, there was an overwhelming response that the majority of services were 'good' (rather than 'bad' or 'average'). Notable exceptions were hospital services and roads and roads maintenance.

The level of use of each service varied greatly among the respondents. In all cases where there was a significant relationship between the use of a service and its perceived standard. Respondents who had used the service recently were more likely than the others to rate the service as 'good.'

SURVEY ANALYSIS

The data collected permits an analysis of service satisfaction levels by a variety of variables, such as age, length of residency in county, etc. The variables of most relevance to this report, however, are type of resident and residency by electoral division.

Respondents were classified into three basic types:

a) URBAN LIFESTYLE: a person with an urban type of occupation, living in an urbanized area of the County, primarily Sherwood Park.

b) COUNTRY ESTATE: a person with an urban type of occupation living in a rural area, generally on an acreage.

c) TRADITIONAL RURAL: a person living in a rural area and employed in a traditional rural occupation, generally farming.

Appendix Table III-1 (p. A-50) shows the percentages for type of resident by electoral division and for the entire county.

RESPONSE BY TYPE OF RESIDENT

Overall Service Satisfaction (see Appendix Table III-2, p. A-51)

All three groups show a majority percentage are 'generally satisfied' with overall county management, with the Rural group showing the highest level of satisfaction and the Estates group the lowest. The Estates group show the highest percentage with a 'neutral' or 'no response' answer. That group also has the highest percentage responding 'generally dissatisfied' although it is only marginally higher than the Rurals.

The Rurals overwhelmingly view the county council as 'generally representative.' The Urbans and the Estates are less satisfied (though not a serious degree) on the matter of council representativeness.

Specific Service Satisfaction (see Appendix Table III-3, p. A-52 to A-56)

Overall, the country Estates populations appear to be least satisfied or most dissatisfied in almost all service cases. The Urban population is the most satisfied and least dissatisfied, with the traditional Rural populations tending towards an intermediate position and average to good ratings in most cases.

Use levels by type of resident, for ten of the fifteen services, are indicated in Appendix Table III-A. In comparison to the figure for the county as a whole few significant differences may be noted. However, in the case of the Urbans mention might be made of: the generally higher levels of use of 'people' services; the notably higher use of library services; and the much higher level of use of public transportation (locally, and to Edmonton).

RESPONSE BY ELECTORAL DIVISION

The main objective in this analysis was to assess how each electoral division (ED) compares with the entire county. The composition of each division according to the type of resident is shown in Appendix Table III-1 (p. A-50). No single division comes at all close to the county average.

The bulk of ED 1 has been annexed mainly by the City of Edmonton. It had the most balanced mix of all the divisions. A particular group of resident types dominated the eight other divisions, with almost complete domination of Urbans in the four Sherwood Park divisions and domination by Estates in the others, especially EDs 2 and 3.

The highest Rural representation, amounting to over four times the county average, is found in ED 5 - the most northerly and least populated division.

Overall Service Satisfaction (see Appendix Table III-4, p. A-57 and Appendix Table III-5, p. A-58)

In regard to overall county management, ED 4 (Central) emerges as the most satisfied and the least dissatisfied, while ED 3 (Cooking Lake area) represents the opposite. Sherwood Park residents are well satisfied with county management, although ED 7 residents are less so than the others.

Three Sherwood Park divisions (6, 7 and 9) are noticeably less satisfied with the representativeness of the county council than the other divisions. ED 4 is the most satisfied.

Specific Service Satisfaction (see Appendix Table III-6, p. A-59 to A-63)

The general make-up of each division's population should be borne in mind when assessing the perceived standard of services. A summary of the situation in each ED follows. Further commentary is included in the Main Report, especially Part III which examines individual services.

ED 1 (annexed):

In comparison to the entire county, a much smaller proportion of the population perceived hospital service provision as being bad. Very different perceptions are manifest with respect to police, fire, water supply and sewage/drainage. A greater proportion felt police protection to be bad or only average. This pattern of response was even more strongly accentuated in the case of fire protection. Water supply also came in for comparatively poor ratings, while, by contrast, sewage/drainage was more favourably perceived. Roads-related services evinced particular dissatisfaction, as did parks/recreation.

The Division also tended to account for generally higher levels of non-response (which may correlate with a finding which indicated that Division residents tended to use services to a lesser degree than the

County population as a whole). High levels of dissatisfaction were also registered in relation to libraries and public transportation.

ED 2 (South-west):

A significantly higher proportion of the division residents than the average considered hospital services to be bad. With regard to the protective services there was more of a tendency to rate them as average rather than good, while for roads services the tendency was to rate them as bad. In many cases high non-response rates pertained, diminishing the significance of rating differences from the norm.

ED 3 (South-east):

The division residents were generally more critical than the others with respect to the perceived standard of local government services; that is, there was a much greater tendency in many instances to rate a service as bad (or only average) rather than good: police, fire, roads, parks/recreation, education.

As with other country areas high non-response rates were apparent for services such as water supply, garbage collection/disposal, sewage/drainage, and public transportation (both locally, and to Edmonton). It may also be significant that the Division residents made much less use of services such as police, libraries and public transport, than the county population as a whole.

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As with other country areas high non-response rates were apparent for services such as water supply, garbage collection/disposal, sewage/drainage, and public transportation (both locally, and to Edmonton). It may also be significant that the Division residents made much less use of services such as police, libraries and public transport, than the county population as a whole.

ED 4 (Central):

With regard to individual services there was: less tendency to rate hospital services as bad; less tendency to rate police services as good; more tendency to rate fire services as only average. On road matters opinions were broadly similar to the county as a whole though there was a greater tendency to rate these services as good rather than simply average. Though a high non-response rate clouds the picture somewhat, there appeared to be greater than normal dissatisfaction with water supply and solid waste services.

ED 5 (North):

Broadly similar general satisfaction levels pertained as compared to the county averages, especially in regard to public health, education, police, parks/recreation, public libraries and day-care. The Division residents were more likely to rate hospital services as good or average, and to rate fire service as bad (where they offered an opinion). On roads there was less of a tendency to rate this service as average, and more inclination to rate it as good.

ED 6 (Sherwood Park N.W.):

In regard to hospital services, this division was more likely to rate them as bad; on police and fire matters the tendency was to rate those services as good rather than simply as average. As with the other purely urban jurisdictions there were much lower non-response rates for services such as water supply, sewage drainage, garbage collection/ disposal; and more of a tendency to rate these services as good. This latter trend also applied to roads and recreation services. On public transportation matters Division residents were much more likely to offer an opinion, and to rate these services as good.

ED 7 (Sherwood Park N.E.):

In regard to services such as public health, police, and fire the residents of ED 7 were more likely to rate them as good. Similarly services such as water supply, sewage/drainage, and garbage collection/ disposal attracted high response rates and 'good' ratings. On roads, residents were less likely to rate these as bad, and more likely to rate them as average or good. Public transportation services also attracted relatively high response rates, and were viewed with comparative satisfaction.

As with the other purely urban divisions, residents tended to make greater use of services such as public health, fire, libraries and public transportation.

ED 8 (Sherwood Park S.W.):

This division contains the oldest of the hamlet's neighbourhoods. On hospital services, the residents were less likely to offer no opinion, and more likely to express dissatisfaction. The protective services were rated as good, as were many other services. A particularly large proportion rated parks/recreation facilities as good. Roads were rated on a rough par with the county norm.

ED 9 (Sherwood Park S.E.):

Another well satisfied urban division, ED 9 residents tended to express similar opinions to the residents of the other Sherwood Park areas. Apart from hospital services, there are apparently no major causes for complaint among the hamlet's residents.

APPENDIX TABLE III-1: TYPE OF RESIDENT/BY ELECTORAL DIVISION

	COUNTY	Electoral Divisions								
		1	2	3	4	5	6	7	8	9
% of Survey Respondents	100	7.7	15.1	8.5	8.9	3.6	17.8	14.0	14.1	10.2
TYPE OF RESIDENT										
Urban	61.1	39.1	2.2	3.0	14.2	7.0	99.5	100	100	100
Estate	31.0	42.4	85.6	80.2	64.2	62.8	0	0	0	0
Rural	5.7	14.1	7.8	10.9	17.9	23.3	0.5	0	0	0
N.R. or not classifiable	2.1	4.3	4.4	5.9	3.8	7.0	0	0	0	0
		1	2	3	4	5	6	7	8	9
		Annexed	South	South-East	Central	North	Sherwood Park			

APPENDIX TABLE III-2: MEASUREMENTS OF GENERAL SATISFACTION

A. SATISFACTION WITH COUNTY MANAGEMENT OVERALL

% of TOTAL	Generally Satisfied	Neutral	Generally DISsatisfied	No Response
Urban (62.5)	56.4	26.1	10.1	7.4
Estate (31.7)	49.9	27.1	13.8	9.2
Rural (5.8)	63.2	19.1	13.3	4.4
TOTAL (100)	54.7	26.0	11.4	7.8

B. OPINIONS ON REPRESENTATIVENESS OF COUNTY COUNCIL

	Generally Representative	Generally UNrepresentative	No Response
Urban (62.5)	60.9	20.3	18.7
Estate (31.7)	62.8	19.2	17.9
Rural (5.8)	86.7	11.8	1.5
TOTAL (100)	63.1	19.5	17.4

N.B. In each case, excepting the neutrals and non-responses, two survey categories have been collapsed into one.

APPENDIX TABLE III-3: SERVICE RATING AND USE LEVEL BY TYPE OF RESIDENT

	Hospital Services				Public Health Services				Education and Schools			
	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total
A. RATING												
Bad	69.3	62.1	32.4	64.9	3.7	1.4	0	2.7	2.8	5.1	1.5	3.4
Average	9.6	6.2	17.6	9.0	17.9	21.1	23.5	19.2	17.7	20.6	25.0	19.1
Good	8.4	8.7	23.5	9.4	69.2	62.3	63.2	66.7	65.1	62.1	67.6	64.3
No Response	12.7	23.0	26.5	16.8	9.2	15.2	13.2	11.3	14.4	12.2	5.9	13.2
	Urbans particularly dissatisfied; Estates only slightly less dissatisfied; Rurals much less dissatisfied. Comparatively high non-response rate among Estates and Rurals.				Particular satisfaction among Urbans.				Rurals and Urbans particularly satisfied. Estates slightly less satisfied.			
B. USE LEVEL	12.1	10.6	18.5	12.0	65.2	56.8	54.4	61.2	66.8	72.1	49.3	66.5

APPENDIX TABLE III-3: SERVICE RATING AND USE LEVEL BY TYPE OF RESIDENT

	Police Protection				Fire Protection				Water Supply			
	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total
A. RATING												
Bad	1.7	5.1	4.4	2.9	1.1	15.2	4.4	5.8	5.1	21.7	8.8	10.6
Average	13.8	28.2	19.1	18.6	10.0	24.4	20.6	15.2	16.9	3.3	5.9	11.9
Good	80.7	59.9	75.0	73.8	83.9	50.4	70.6	72.5	76.1	15.4	23.5	53.8
No Response	3.9	6.8	1.5	4.6	5.0	10.0	4.4	6.5	1.9	59.6	61.8	23.7
	Urbans most satisfied; Estates least satisfied.				Urbans particularly satisfied as well as least dissatisfied. Estates least satisfied and most dissatisfied.				Very high non-response rates for Estates and Rurals. Urbans particularly satisfied, Estates least so.			
B. USE LEVEL	30.5	28.0	26.9	29.4	6.6	4.9	8.8	6.1	---			

APPENDIX TABLE III-3: SERVICE RATING AND USE LEVEL BY TYPE OF RESIDENT

	Sewage/Drainage				Garbage Coll./Disp.				Roads and Road Services			
	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total
A. RATING												
Bad	19.3	15.4	4.4	17.2	3.6	16.8	8.8	8.1	22.3	36.9	16.2	26.5
Average	18.7	7.9	11.8	14.9	17.9	11.9	10.3	15.5	41.0	32.5	35.3	38.0
Good	59.0	11.7	14.7	41.4	76.9	28.5	5.9	57.4	35.8	29.8	48.5	34.6
No Response	3.0	65.0	69.1	26.5	1.7	42.8	75.0	19.0	1.0	0.8	0	0.9
	Issue of limited relevance for bulk of Estate and Rural populations.				Urbans most satisfied; Estates least satisfied. High non-response rate among Estates and, especially, among rurals.				Estates least satisfied, Rurals most satisfied. Urbans registering average satisfaction.			
B. USE LEVEL	---				---				---			

APPENDIX TABLE III-3: SERVICE RATING AND USE LEVEL BY TYPE OF RESIDENT

	Social Services/Welf.				Parks/Recreation				Public Library			
	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total
A. RATING												
Bad	1.7	2.2	2.9	1.9	6.2	7.9	1.5	6.4	2.8	3.0	0	2.7
Average	13.6	10.6	14.7	12.7	19.9	26.6	27.9	22.5	11.3	13.6	14.7	12.2
Good	28.7	19.2	41.2	26.5	68.0	52.8	63.2	62.9	71.4	59.6	64.7	67.3
No Response	56.0	68.0	41.2	58.9	5.9	12.7	7.4	8.2	14.6	23.8	20.6	17.9
	Minority service category; High non-response rates, especially in case of Estates. Urban and especially rural users most satisfied; Estates less so.				Urbans most satisfied, others less so, especially in case of the Estates.				Urbans particularly satisfied; Estates least so. Rurals intermediate satisfaction and near average opinions.			
B. USE LEVEL	5.8	3.3	1.6	4.7	---				72.1	55.9	56.7	65.4

APPENDIX TABLE III-3: SERVICE RATING AND USE LEVEL BY TYPE OF RESIDENT

	Day Care				Local Public Transp.				Edmonton Pub. Transp.			
	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total	Urban	Estate	Rural	Total
A. RATING												
Bad	6.2	7.0	0	6.1	12.9	13.0	4.4	12.5	12.8	13.0	7.4	12.5
Average	7.0	3.3	7.4	5.8	23.4	4.9	5.9	16.5	21.2	8.7	7.4	16.4
Good	9.9	5.7	11.8	8.7	34.5	10.0	22.1	26.0	40.2	12.5	20.6	30.2
No Response	76.9	84.0	80.9	79.4	29.2	72.1	67.6	45.0	25.9	65.9	64.7	40.8
	Very high non-response rates across the board, though less so in case of urbans. Mixed feelings about service in each case, though 'on balance' the users rate service as good.				Service not rated by a majority of Rurals and Estates. Also not relevant for a substantial minority of urbans. Urban users most satisfied; Estates least so.				Service mainly of concern to Urbans, who are comparatively satisfied with the service. Otherwise, Estates least satisfied.			
B. USE LEVEL	3.4	1.9	0	2.7	44.7	6.5	7.8	30.3	54.8	13.1	10.9	38.8

APPENDIX TABLE III-4: SATISFACTION WITH COUNTY MANAGEMENT (%) BY ELECTORAL DIVISION

	Generally Satisfied	No Strong Opinion Either Way	Generally Dissatisfied	(No Reply)	
County	55.1	25.8	11.3	(7.8)	
E.D. 1	51.1	28.3	9.7	(10.9)	1
E.D. 2	57.3	26.7	16.1	(10.0)	2
E.D. 3	49.5	22.8	19.8	(7.9)	3
E.D. 4	64.2	23.6	6.6	(5.7)	4
E.D. 5	51.2	32.6	9.3	(7.0)	5
E.D. 6	56.2	25.0	10.9	(8.0)	6
E.D. 7	53.0	29.5	12.0	(5.4)	7
E.D. 8	61.9	22.6	7.1	(8.3)	8
E.D. 9	59.5	25.6	8.3	(6.6)	9

APPENDIX TABLE III-5: PERCEIVED REPRESENTATIVENESS OF COUNTY COUNCIL (%) BY ELECTORAL DIVISION

	Generally Representative	Generally Unrepresentative	No Reply
County	63.1	19.4	17.6
E.D. 1	64.1	14.1	21.7
E.D. 2	63.3	20.5	16.1
E.D. 3	65.3	18.8	15.8
E.D. 4	71.7	17.0	11.3
E.D. 5	69.8	16.3	14.0
E.D. 6	57.1	22.7	20.3
E.D. 7	58.4	22.3	19.3
E.D. 8	68.4	16.1	15.5
E.D. 9	59.5	19.8	20.7

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Hospital Services				Public Health Services				Education & Schools				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	64.8	9.0	9.2	(17.0)	2.7	19.3	66.4	(11.6)	3.4	19.2	63.8	(13.5)	County
E.D. 1	39.1	7.6	7.6	(45.7)	4.3	14.1	54.3	(27.2)	3.3	13.0	65.2	(18.5)	E.D. 1
E.D. 2	74.4	2.2	3.3	(20.0)	0.6	25.0	61.1	(13.3)	6.1	20.6	61.7	(11.7)	E.D. 2
E.D. 3	67.3	3.0	8.9	(20.8)	1.0	25.7	62.4	(10.9)	7.9	27.7	52.5	(11.9)	E.D. 3
E.D. 4	47.2	14.2	18.9	(19.8)	3.8	19.8	62.3	(14.2)	0.9	19.8	67.9	(11.3)	E.D. 4
E.D. 5	27.9	25.6	27.9	(18.6)	2.3	4.7	65.1	(27.9)	2.3	20.9	62.8	(14.0)	E.D. 5
E.D. 6	72.6	13.7	7.1	(6.6)	4.2	17.9	68.4	(9.4)	1.9	19.3	62.7	(16.0)	E.D. 6
E.D. 7	63.3	13.3	7.2	(16.3)	3.6	14.5	71.1	(10.8)	3.6	15.1	65.1	(16.3)	E.D. 7
E.D. 8	73.2	5.4	9.5	(11.9)	1.8	23.8	67.9	(6.5)	3.6	20.2	65.5	(10.7)	E.D. 8
E.D. 9	73.6	5.8	9.9	(10.7)	2.5	16.5	79.3	(1.7)	0.8	19.0	69.4	(10.7)	E.D. 9

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Police Protection				Fire Protection				Water Supply				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	3.0	18.8	73.6	(4.6)	5.8	15.2	72.3	(6.6)	10.9	11.9	52.9	(24.2)	County
E.D. 1	7.6	30.4	54.3	(7.6)	28.3	17.4	44.6	(9.8)	18.5	6.5	37.0	(38.0)	E.D. 1
E.D. 2	3.3	20.6	70.0	(6.1)	5.0	23.9	63.3	(7.8)	24.4	4.4	12.2	(58.9)	E.D. 2
E.D. 3	5.9	34.7	53.5	(5.9)	15.8	25.7	48.5	(9.9)	17.8	2.0	12.9	(67.3)	E.D. 3
E.D. 4	4.7	29.2	64.2	(1.9)	2.8	25.5	67.0	(4.7)	20.8	10.4	33.0	(35.8)	E.D. 4
E.D. 5	2.3	20.9	62.8	(14.0)	23.3	18.6	34.9	(23.3)	16.3	4.7	2.3	(76.7)	E.D. 5
E.D. 6	2.4	11.8	80.7	(5.2)	1.4	11.3	81.6	(5.7)	2.4	14.6	80.2	(2.8)	E.D. 6
E.D. 7	1.2	12.7	83.1	(3.0)	0.6	10.8	82.5	(6.0)	2.4	18.1	79.5	(0)	E.D. 7
E.D. 8	0	14.9	83.3	(1.8)	0.6	5.4	91.1	(3.0)	4.8	15.5	78.6	(1.2)	E.D. 8
E.D. 9	3.3	9.9	83.5	(3.3)	0	8.3	88.4	(3.3)	4.1	21.5	74.4	(0)	E.D. 9

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Hospital Services				Public Health Services				Education & Schools				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	64.8	9.0	9.2	(17.0)	2.7	19.3	66.4	(11.6)	3.4	19.2	63.8	(13.5)	County
E.D. 1	39.1	7.6	7.6	(45.7)	4.3	14.1	54.3	(27.2)	3.3	13.0	65.2	(18.5)	E.D. 1
E.D. 2	74.4	2.2	3.3	(20.0)	0.6	25.0	61.1	(13.3)	6.1	20.6	61.7	(11.7)	E.D. 2
E.D. 3	67.3	3.0	8.9	(20.8)	1.0	25.7	62.4	(10.9)	7.9	27.7	52.5	(11.9)	E.D. 3
E.D. 4	47.2	14.2	18.9	(19.8)	3.8	19.8	62.3	(14.2)	0.9	19.8	67.9	(11.3)	E.D. 4
E.D. 5	27.9	25.6	27.9	(18.6)	2.3	4.7	65.1	(27.9)	2.3	20.9	62.8	(14.0)	E.D. 5
E.D. 6	72.6	13.7	7.1	(6.6)	4.2	17.9	68.4	(9.4)	1.9	19.3	62.7	(16.0)	E.D. 6
E.D. 7	63.3	13.3	7.2	(16.3)	3.6	14.5	71.1	(10.8)	3.6	15.1	65.1	(16.3)	E.D. 7
E.D. 8	73.2	5.4	9.5	(11.9)	1.8	23.8	67.9	(6.5)	3.6	20.2	65.5	(10.7)	E.D. 8
E.D. 9	73.6	5.8	9.9	(10.7)	2.5	16.5	79.3	(1.7)	0.8	19.0	69.4	(10.7)	E.D. 9

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Police Protection				Fire Protection				Water Supply				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	3.0	18.8	73.6	(4.6)	5.8	15.2	72.3	(6.6)	10.9	11.9	52.9	(24.2)	County
E.D. 1	7.6	30.4	54.3	(7.6)	28.3	17.4	44.6	(9.8)	18.5	6.5	37.0	(38.0)	E.D. 1
E.D. 2	3.3	20.6	70.0	(6.1)	5.0	23.9	63.3	(7.8)	24.4	4.4	12.2	(58.9)	E.D. 2
E.D. 3	5.9	34.7	53.5	(5.9)	15.8	25.7	48.5	(9.9)	17.8	2.0	12.9	(67.3)	E.D. 3
E.D. 4	4.7	29.2	64.2	(1.9)	2.8	25.5	67.0	(4.7)	20.8	10.4	33.0	(35.8)	E.D. 4
E.D. 5	2.3	20.9	62.8	(14.0)	23.3	18.6	34.9	(23.3)	16.3	4.7	2.3	(76.7)	E.D. 5
E.D. 6	2.4	11.8	80.7	(5.2)	1.4	11.3	81.6	(5.7)	2.4	14.6	80.2	(2.8)	E.D. 6
E.D. 7	1.2	12.7	83.1	(3.0)	0.6	10.8	82.5	(6.0)	2.4	18.1	79.5	(0)	E.D. 7
E.D. 8	0	14.9	83.3	(1.8)	0.6	5.4	91.1	(3.0)	4.8	15.5	78.6	(1.2)	E.D. 8
E.D. 9	3.3	9.9	83.5	(3.3)	0	8.3	88.4	(3.3)	4.1	21.5	74.4	(0)	E.D. 9

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Sewage & Drainage				Garbage Coll./Disp.				Roads				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	17.4	14.7	40.9	(27.0)	8.3	15.3	57.2	(19.2)	26.4	38.2	34.6	(0.8)	County
E.D. 1	10.9	13.0	31.5	(44.6)	8.7	13.0	41.3	(37.0)	47.8	31.5	16.3	(4.3)	E.D. 1
E.D. 2	21.1	5.6	8.9	(64.4)	14.4	13.9	37.2	(34.0)	33.3	40.6	25.6	(0.6)	E.D. 2
E.D. 3	13.9	7.9	7.9	(70.3)	18.8	9.9	24.8	(46.5)	44.6	21.8	32.7	(1.0)	E.D. 3
E.D. 4	10.4	15.1	33.0	(41.5)	22.6	13.2	23.6	(40.6)	29.2	30.2	40.6	(0)	E.D. 4
E.D. 5	7.0	4.7	7.0	(81.4)	2.3	4.7	9.3	(83.7)	25.6	23.3	51.2	(0)	E.D. 5
E.D. 6	18.9	18.4	58.5	(4.2)	6.6	14.6	77.8	(0.9)	17.5	40.1	42.0	(0.5)	E.D. 6
E.D. 7	24.1	19.9	55.4	(0.6)	1.2	16.3	81.9	(0.6)	18.1	44.6	36.1	(1.2)	E.D. 7
E.D. 8	16.7	22.0	60.1	(1.2)	2.4	22.0	73.8	(1.8)	22.0	44.6	32.7	(0.6)	E.D. 8
E.D. 9	19.0	14.9	64.5	(1.7)	0.8	19.8	79.3	(0)	15.7	44.6	39.7	(0)	E.D. 9

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Social Services/Welf.				Parks and Recreation				Public Libraries				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	1.9	12.7	26.3	(59.1)	6.3	22.7	62.3	(8.7)	2.7	12.0	66.9	(18.4)	County
E.D. 1	4.3	12.0	15.2	(68.5)	10.9	31.5	32.6	(25.0)	7.6	14.1	35.9	(42.4)	E.D. 1
E.D. 2	2.2	7.8	16.1	(73.9)	3.3	23.3	61.1	(12.2)	0.6	10.6	67.2	(21.7)	E.D. 2
E.D. 3	3.0	11.9	25.7	(59.4)	7.9	36.6	43.6	(11.9)	2.0	14.9	62.4	(20.8)	E.D. 3
E.D. 4	0.9	19.8	30.2	(49.1)	8.5	22.6	61.3	(7.5)	5.7	12.3	59.4	(22.6)	E.D. 4
E.D. 5	2.3	9.3	41.9	(46.5)	9.3	14.0	65.1	(11.6)	4.7	18.6	51.2	(25.6)	E.D. 5
E.D. 6	0.9	11.8	26.4	(60.8)	6.6	17.9	68.9	(6.6)	1.9	11.3	68.4	(18.4)	E.D. 6
E.D. 7	1.2	8.4	28.3	(62.0)	8.4	16.3	71.1	(4.2)	3.0	11.4	72.3	(13.3)	E.D. 7
E.D. 8	1.8	18.5	32.1	(47.6)	2.4	23.8	67.9	(6.0)	1.2	13.7	75.6	(9.5)	E.D. 8
E.D. 9	1.7	15.7	30.6	(52.1)	5.0	22.3	71.1	(1.7)	2.5	7.4	83.5	(6.6)	E.D. 9

APPENDIX TABLE III-6: PERCEIVED STANDARD OF PROVISION OF LOCAL GOVERNMENT SERVICES (%) BY ELECTORAL DIVISION

	Day Care Facilities				Local Public Transport				Pub. Transport to Edmonton				
	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	Bad	Aver.	Good	(N.R.)	
County	6.0	6.0	8.7	(79.3)	12.5	16.3	25.7	(45.5)	12.6	16.2	30.2	(41.0)	County
E.D. 1	3.3	7.6	6.5	(82.6)	23.9	9.8	6.5	(59.8)	27.2	5.4	2.2	(65.2)	E.D. 1
E.D. 2	6.1	2.2	6.7	(85.0)	11.1	5.0	11.1	(72.8)	8.3	8.9	21.1	(61.7)	E.D. 2
E.D. 3	7.9	4.0	6.9	(81.2)	13.9	5.9	12.9	(67.3)	10.9	12.9	15.8	(60.4)	E.D. 3
E.D. 4	6.6	9.4	7.5	(76.4)	18.9	7.5	10.4	(63.2)	26.4	8.5	6.6	(58.5)	E.D. 4
E.D. 5	7.0	2.3	11.6	(79.1)	18.6	0.0	14.0	(67.4)	25.6	2.3	11.6	(60.5)	E.D. 5
E.D. 6	7.1	5.2	8.0	(79.7)	11.3	23.6	30.7	(34.4)	12.7	20.8	34.0	(32.5)	E.D. 6
E.D. 7	6.0	5.4	7.2	(81.3)	10.2	24.1	34.9	(30.7)	6.6	23.5	42.2	(27.7)	E.D. 7
E.D. 8	5.4	11.3	13.7	(69.6)	7.7	22.6	48.8	(20.8)	8.9	20.2	56.0	(14.9)	E.D. 8
E.D. 9	4.1	5.0	11.6	(79.3)	9.1	28.1	36.4	(26.4)	5.8	26.4	45.5	(22.3)	E.D. 9

POOR

QUALITY

ORIGINAL